THE

Medical and Physical Journal.

VOL. XIV.] AUGUST 1, 1805. [NO. LXXVIII.

Printed for R. PHILLIPS, by W. Thorne, Red Lion Court, Fleet Street, London.

To Dr. BATTY.

DEAR SIR,

HAVING been lately informed of two cases of children losing their lives in consequence of cutting what is called the *bridle* of the tongue, by which a fatal hæmorrhage was occasioned, I hope you will excuse my requesting you to insert the following observations on the subject in the Medical and Physical Journal.

It was formerly an almost universally received opinion, that every child was born tongue-tyed. This was a great error; but if a child from mismanagement, or any cause, was incapable of sucking, or indisposed to suck at particular times, or did not suck in the manner the nurse thought right, it was immediately said to be tongue-tyed; and the *frænum* of the tongue being on inspection observed, the opinion was confirmed. All medical men know that the *frænum* of the tongue is a natural part, intended for the important purposes of preventing the retraction of the tongue beyond a certain degree, and for regulating its actions, particularly that of duly modulating its voice. By cutting the frænum, it cannot be doubted but that these advantages are impaired, the enunciation injured, and that which is called speaking thick, pleno ore, is occasioned.

The *frænum* of the tongue is much shorter in some children than in others; but experience has sufficiently proved that when it is apparently short, it will by frequent action be stretched so much as to allow all the necessary and proper motions of the tongue; and even if the *frænum* should confine the end of the tongue, forming a small indentation at the extremity, the child would not be hindered from sucking or speaking distinctly, or suffer any inconvenience from it.

An infant can only use its tongue for sucking, for swallowing its food, and for crying; and the last of these proves

that it is not tongue-tyed. Nor have I ever met with one instance of a child, in whom it was absolutely necessary to cut the *frænum* of the tongue. I have indeed sometimes done it to satisfy the prejudice of parents, or those who have the care of children; or to prevent its being done by those who might be less careful than myself; but then I have just divided the edge or selvage of the *frænum*, leaving the farther division to the action of the tongue; and by this method all danger has been avoided. Yet I believe it may be justifiable to say, that the *frænum* never requires cutting.

In so unhappy a case as that of a dangerous hæmorrhage occasioned by cutting the *frænum* of the tongue negligently, ignorantly, or rashly; it would perhaps be impossible to tye the vessels from which the blood was poured, and any application which could be safely employed might fail; yet one would hardly feel satisfied without trying, when all other means had failed, the actual cautery.

I am, &c.

July 9, 1805. THOMAS DENMAN.

To the Editors of the Medical and Physical Journal.

Gentlemen,

I Beg leave to transmit for your insertion a case of Prolapsus Uteri, in which the sponge pessary seems to have a decided and manifest superiority over all others. My reason for offering this observation to the medical world, is merely to corroborate the method recommended by Mr. Dawson (Vide Medical and Physical Journal, No. 72, page 129) whose valuable and well written paper I read with much pleasure.

About four months ago a case of prolapsus uteri came under my care; the lady informed me that she had been afflicted with this distressing complaint for some years; she had applied to a medical practitioner in the neighbourhood, who had recommended to her the common box-wood pessary, but that she still remained in a very uncomfortable situation; she therefore begged of me to think of some method by which she might attain more relief. I returned home without affording her much encouragement as to my success; however, at the time I was puzzling myself for some new contrivance, your very valuable Journal came to hand;

hand; I confess I never felt more gratifyed than in the perusal of Mr. Dawson's excellent paper. I immediately had recourse to the method adopted by Mr. D. and I am happy to announce, with every possible advantage. The lady was almost overwhelmed with gratitude, and she can now go about her usual avocations with ease and pleasure.

I should certainly feel myself remiss were I not to return my sincere thanks to Mr. Dawson for his valuable information, and for laying it before the public.

I shall conclude with requesting every medical practitioner, when opportunity shall serve, to give the sponge pessary (agreeably to the plan adopted by Mr. Dawson) a fair trial, as standing in pre-eminence above all others.

I am, &c.

Workington, July 7, 1805. WILLIAM SIMPSON, Surgeon.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

MUCH difference of opinion having existed respecting the utility of the different mineral tonics in the cure of Intermittents, I have been induced to note down some observations on their exhibition, as also, on the cure of ague in general, which I have been enabled to make, from the circumstance of having had from fifty to sixty cases of that disease in my hospital within the last four months; and also, in the same period, an equal if not greater number under my care, that have occurred among the women and children allied to the regiment to which I have the honor to belong. I have taken the liberty of transmitting them for your perusal; and if they should be thought sufficiently interesting, you are at liberty to insert them in your valuable Journal.

A succession of agues among the privates of the West Essex Militia first occurred in the beginning of March; the regiment then being in garrison at Sheerness, at which place the disease was most decidedly endemial; from that period until the 24th of April, when it arrived in the Isle of Wight, about thirty men, women, or children, were taken ill with the disease; and from its arrival here, until within the last three weeks, scarce a day passed without instances of fresh attacks. Not to enter fully into

 the

the predisposing or proximate causes, or indulge in any speculative theory, I cannot help saying, that from the salubrious air, and elevated situation of this country, together with the unfrequency of ague occurring among the natives,* I cannot conceive the cause to have originated here, but that the evil must for some time have laid dormant. The debilitating effects of so many inhabitants having been crowded together in the garrison at Sheerness; the formation of the barracks ill adapted for the purpose of ventilation; in addition to the low and marshy country adjoining, must, I should suppose, have produced a predisposition to ague in the system, which may have been afterwards called into action by cold, or any casual cause of obstructed or diminished perspiration. At the commencement of the disease, where the biliary system was at all deranged, an emetic, or calomel and rhubarb was administered; after which the solutio arsenici was uniformly given, and with the greatest success imaginable, so far, as it prevented a recurrence of the fit, and paved the way for the bark, or some other vegetable tonic to effect a compleat cure. However serviceable it may be in preventing for a time a return of the paroxysm, I am convinced by experience, whoever trusts to it alone, to reinstate his patient in perfect health and strength, will in many instances indeed be grievously disappointed; having constantly observed, where it has not been discontinued after a remission of the fit, and the bark or some other tonic substituted, the same swelling of the legs, the same pallid appearance of the lips, and the same want of tone in the system in general, have continued until between the seventh and eleventh day, when a return of the disease has been but too often the unpleasing event; on the contrary, where the solution has been discontinued, and the bark given, scarce ever have I known it fail to render the cure compleat; in cases where there has been a disposition to nauseate the bark, I have found the quassia after the exhibition of the solution of the greatest utility.

Supposing the arsenic to procure a remission of the attack by any tonic powers, as a tonic it has certainly its "ne plus ultra," and after a certain time, instead of strength-

---

* Since writing the above I have had some conversation with a very intelligent practitioner, who informs me, ague is by no means a rare occurrence in this part of the island, although he knows of no recent instances, nor upon the most minute enquiry have I been able to hear of more than two or three cases having lately occurred.

strengthening, most undoubtedly debilitates the stomach and system in general; never have I seen its use persevered in, (whether successful or not in the first instance) more than ten or twelve days, without its ultimately proving prejudicial. Both in dose and preparation I have used it according to the formula given by Dr. Fowler, and have never observed it produce any irritation in the stomach or intestines, but what (omitting its exhibition) a few drops of laudanum have immediately composed. I am well aware, from the mildness of the attack, and season of the year, that many of the cases might have recovered without that or any other medicine; but from so constantly having observed its gradual and unvarying effects, I must be an errant Cynic, indeed, for one moment to be insensible to its value; two cases however occurred, in which the solution proved inefficacious; the bark liberally given unavailing, and which run the gauntlet through the other various tonics, both vegetable and mineral, without any good effect; and which also derived no benefit from that dernier resort, "a change of air," although it was experienced in no small degree, as a removal from the marshes in the isle of Sheppy to the more bracing air in the Isle of Wight must evince. From its having been recommended from the most respectable quarter, I was induced to try how far the shock from a shower-bath, or a sudden immersion in salt water upon the approaching paroxysm, might be able to avert it; from our contiguous situation to the sea, I was inclined to make essay of the latter; the gradual declivity of the shore in this bay, rendered some assistance necessary, to make the immersion general and instantaneous; and which I was enabled to accomplish by the assistance of four men, who sustained my patient in a blanket above the surface of the water, until there was sufficient depth, when he was suddenly immersed, immediately brought on shore, and rubbed dry with a coarse cloth; the essential utility of which far exceeded my most sanguine expectations, as the two following cases will prove.

John Spencer, of the grenadier company, aged twenty-four, a strong athletic man, was taken ill with an ague of a tertian type, at Sheerness, towards the end of April, which continued invariably recurring every second day, until the 1st of June, when having discontinued all medicines, at nine A. M. (about half an hour before the usual return of the attack) he was immersed in the sea; no cold fit followed; a slight accession of fever only took place.

 3d.

3d. and 5th. The immersion repeated at the same hour, a slight accession of fever still following.

7th. Immersion repeated; no fever whatever; was ordered to bathe every morning, and allowed a pint of porter daily; no medicines whatever were exhibited.

17th. Was discharged for partial duty. Has now taken general duty a fortnight, and, to use his own emphatic words, "was never heartier in his life."

John Hills, a thin puny lad, aged nineteen, was admitted into the hospital at Sheerness on the 21st of April, with an intermittent of a quotidian type, which in the course of a few days degenerated into a tertian; had taken the bark, sol. arsenici, zinc. vitriol. &c. &c. without any good effect.

June 7. The fit as usual, hot paroxysm lasting several hours, legs much swelled, and much general debility from the repeated attacks; was ordered to discontinue his medicines.

11th. Seven A. M. (the fit usually returning soon after) he was immersed in the sea; at nine A. M. he experienced a slight chilly sensation, but no direct shaking; a little fever took place, but which lasted not more than an hour.

13th. Immersion repeated; no shivering or fever followed; was ordered to bathe every morning, and allowed a generous diet. He gradually recovered his strength, and was on the point of being discharged the hospital, when he was again attacked; the immersion was again had recourse to with the same success, and on the 12th instant he was discharged quite well.

The exhibition of opium previous to the return of the paroxysm, I have never found of any essential utility; that it lessens the cold fit is true, but it is only to lengthen, and make more formidable the accession of fever; never have I found it upon repetition prove ultimately successful.

Both the cuprum vitriolatum and zincum vitriolatum, I have repeatedly tried, and have sometimes found them serviceable, but much more frequently totally inefficacious. From the latter having been honoured with the term "specific," much acrimonious controversy has lately taken place; that it is entitled to that honour I can by no means allow, from having repeatedly witnessed its inutility. If I thought it deserving it, I would most readily grant it, as I must confess I cannot see any thing so formidable or terrific in the epithet abstractedly "in se."

Colwell Baracks, Isle of Wight, I am, &c.
July 14, 1805.

CHARLES SHILLITO,
Member of the Royal College of Surgeons,
and Surgeon to the West Essex Militia.

To the Editors of the Medical and Physical Journal.

Gentlemen,

In my observations on Amputation, which by your indulgence have obtained a place in the Medical Journal, I have, in common with most other chirurgical writers, assigned the invention of the ligature on the arteries for the suppression of hæmorrhage after amputation to Ambrose Paré; a merit which your Correspondent, under the signature of 'Chirurgicus,' has endeavoured to deprive him of, as appears by an article inserted in your last number, page 391. As my own communication was duly authenticated, I might have been excused from noticing any anonymous remarks upon it; but as I am less solicitous about forms, than anxious after truth, justice to the memory of Paré demands of me that the concealment of the name of the author of those remarks should be no bar to my further enquiries.

A careful review of the passages from Celsus, which 'Chirurgicus' has himself quoted, would I think convince him, that he has in one point mistaken the sense of his author, as well as the book from whence his extracts are taken, it being the fifth book of the works of Celsus,* and not the third, as 'Chirurgicus' has asserted, in which they are contained. But these are trifling mistakes compared with those which are to follow; as it will soon be made manifest, that 'Chirurgicus' has not only misapprehended Celsus, but Paré, and myself; and that his opinions on this subject are irreconcileable with the recorded facts upon it.

The very title of my own observations restricts them solely to the operation of amputation, beyond which they were never meant to be construed with any latitude; therefore to decide upon them in a general sense, is to pass sentence on grounds it was not within my intention to defend. Thus then it is certain, that the objections of 'Chirurgicus' do not apply to my own case; nor is he more happy in his reference to Celsus, for where, in this excellent writer, does he find the practice inculcated of securing the vessels by ligature after the amputation of a limb? His quotation—'Quod si illa quoque profluvio vincuntur, venæ,

---

* Lugd. Batav. 1746.

venæ, quæ sanguinem fundunt apprehendendæ, circaque id, quod ictum est, duobus locis deligandæ, intercidendæque sunt, ut et in se ipsæ coeant, et nihilominus ora præclusa habeant,' relates most distinctly to the securing of a wounded vessel by means of a *double* ligature, and has nothing to do with amputation where the second ligature could not be applied. And this was the construction put upon it by all the commentators on this particular passage, as we find it in the Varior. Auctor. in Celsum Notæ, p. 290, lib. viii. *Curatio adv. profusionem &c.* (vulneribus, quæ maxime per tela inferuntur) Casaub. & p. 291, lib. iii. *Ut et in se ipsæ coëant* (ut in se junctæ coëant. Const.

If, from the passage he had cited, 'Chirurgicus' had undertaken to prove that Celsus was acquainted with the circulation of the blood, or had ascertained in what manner hæmorrhage is suppressed by the coalescence of the sides of a wounded artery, it might have somewhat availed his purpose; but I must confess that I do not see how those who may have thought differently from him upon a point so little controverted before, can justly incur the charge of vanity, or ignorance. Charges thus loosely preferred might rob even Harvey of the discovery of the circulation of the blood; or Newton of the principle of gravitation, both of which have immortalized the names of those great men.

Not only however is Paré denied by 'Chirurgicus' the honour of the discovery for which I contend, but he is accused of having acted disingenuously, as it is said to be 'more than probable that Paré had learnt it from some Italian surgeons;' it is fit therefore that Paré should be heard in his own defence.

In lib. xii. c. 20, (Ed. 1649,) entitled, 'How to stanch the Bleeding when the Member is taken off,' he recommends to draw forth the ends of the severed vessels with the crow's beak forceps, (of which instrument a plate is given) and when they are so drawn forth, to bind them with a strong double thread.—P. 340. And in Chap. 22 of the same book, he directs us in what manner to proceed 'if any of the bound up vessels chance to get loose.' He says, 'then let the work-master take a needle some four fingers long, square, and having sharp edges, drawing after it a three or four doubled strong thread. With this let him bind the vessel in the following manner. Let him thrust his needle on the outside into the flesh, some half fingers breadth from the loosed vessel until he come to the end thereof, then let him put it about it, and bring it back again, but so that there be no more than the space of a finger's

finger's breadth between the going in, and coming forth of the needle. In this space let him put a linen rag three or four times doubled, and thereupon bind somewhat strait the two ends of the thread together. For so he shall hinder the knot from hurting the flesh which lies under it in the bindings, and also add strength thereto. For so the bound up orifice of the vessel will in short space be agglutinated to the adjoining flesh, and that so firmly, that there hath never been seen any one drop of blood to have flowed from a vessel so bound up.'

Well aware of your aversion to long quotations, as rather wishing to dedicate your pages to original matter, I feel myself called upon to apologize for the length of the preceding quotation, and especially for the one that is about to follow, which, long as it is, I know not how to shorten, it is so essential to the making out of my case; and especially, as it may operate a conviction even over the scruples of 'Chirurgicus' himself. I shall transcribe the whole chapter.

"Chap. 24. What just occasion moved the author to devise this new form of remedy, to stanch the blood after the amputation of a member, and to forsake the common way used almost by all chirurgeons; which is, by application of actual cauteries?"

"Verily, I confess, I formerly have used to stanch the bleeding of members after amputation, after another manner than that I have a little before mentioned. Whereof I am ashamed, and agrieved; but what should I do? I have observed my masters, whose method I intended to follow, alwaies to do the like; who thought themselves singularly well appointed to stanch a flux of blood, when they were furnished with various store of hot irons and caustick medicines, which they would use to the dismembered part, now one, then another, as they themselves thought meet. Which thing cannot be spoken, or but thought upon without great horror, much less acted. For this kind of remedy could not but bring great and tormenting pain to the patient, seeing such fresh wounds made in the quick and sound flesh are endued with exquisite sense. Neither can any caustick be applied to nervous bodies, but that this horrid impression of the fire will be presently communicated to the inward parts, whence horrid symptoms ensue, and oft-times death itself. And verily of such as were burnt, the third part scarce ever recovered, and that with much adoe, for that combust wounds difficultly come to cicatrization; for by this burning are caused cruel pains, whence

whence a feaver, convulsion, and oft-times other accidents worse than these. Adde hereunto, that when the eschar fell away, oft-times a new hæmorrhage ensued, for stanching whereof they were forced to use other caustick and burning instruments. Neither did these good men know any other course; so by this repetition there was this great losse and waste made of the fleshy and nervous substance of the part. Through which occasion the bones were laid bare, whence many were out of hope of cicatrization, being forced for the remainder of their wretched life to carry about an ulcer upon that part which was dismembered; which also took away of fitting or putting to of an artificial leg or arm instead of that which was taken off. Wherefore I must earnestly entreat all chirurgeons, that leaving this old and too too cruel way of healing, they would embrace this new, which I think was taught me by the special favour of the sacred Deity, for I learnt it not of my masters, nor of any other, neither have I at any time found it used by any. Only I have read in Galen, that there was no speedier remedy for stanching of blood, than to bind the vessels through which it flowed towards their roots, to wit, the liver and heart. This precept of Galen, of binding and sewing the veins and arteries in the new wounds, when as I thought it might be drawn to these which are made by the amputation of members, I attempted it in many, yet so that at first in my budding practice thereof, I alwayes had my cauteries and hot irons in a readinesse, that if any thing happened otherwise than I expected in this my new work, I might fetch succour from the ancient practice, until at length confirmed by the happy experience of almost an infinite number of particulars, I bid eternally adieu to all hot irons and cauteries, which were commonly used in this work. And I think it fit that chirurgeons do the like. For antiquity, and custome in such things as are performed by art, ought not to have any sway, authority or place, contrary to reason, as they oft-times have in civil affaires; wherefore let no man say unto us, that the ancients have alwayes done thus."

And in the next chapter, (25) in recording the history of an amputation, he says, "Then presently I stanched the blood with an hot iron, for as yet I knew no other course."

I shall forbear to make any further comment on these important citations, and leave the candid and judicious reader to appreciate their respective merits, and also their bearing on the point before us.

A PLAN

A Plan for the Extermination of the Small-pox.

The cow-pox still continues to engage the attention of many of your numerous Correspondents; indeed, what subject more important can arrest it? Surely the preservation of life is the first object of our labours; and next to prevent the propagation of disease, and its consequent effects, deformity. Although the security yielded by the cow-pox from the variolous contagion is so generally admitted, I have often felt surprize, considering the magnitude of the object, that no legislative enactment has been made to at once crush the small-pox. This I think might be accomplished speedily, by ordering a general vaccination without delay; and by binding every parent to vaccinate his child within an early period after birth.

Were a general inoculation for the cow-pox to be duly enforced, all concern about the small-pox contagion would be superseded; as that dire pestilence would, by a single blow, be robbed of its victims. And by extending the same preserving principle to an early age after birth, its rage as an epidemic, on whatsoever cause it may depend, must altogether cease. Acting upon these sentiments, I have for several years made it a rule in my own practice, to inoculate within the month, where I could prevail upon my fair friends to grant my request; not only to give security to their very tender offspring, but also to prove the mildness of vaccination, and thus, by example, more quickly to circulate its advantages.

To the interposition of legislative authority on this occasion, I can see no solid objection. Laws of quarantine are deemed expedient by the legislature to prevent the inroads of the plague among us; yet, have more lives been lost by it than by the continued and destructive ravages of the small-pox?

In the numbering of the people, or the taking of the Census, I have often lamented that a clause was not inserted in the act, to compel every master to certify to the state of his family in regard to the small-pox; and in defect of security from it in any of the members, to award early vaccination. And it should have been made the especial duty of the proper officer, to ascertain that the enactments of the statute had been sufficiently complied with.

I am, &c.

W. SIMMONS.

Manchester, May 7, 1805.

To

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS amputation at the shoulder-joint has been performed but seldom, perhaps the relation of the following case may be acceptable to your readers.

Sturgeon Church, about forty years of age, of thin and scrophulous habit, was admitted into the Bedford Infirmary in October last. About six months previous to her admission, she was attacked with pain under the deltoid muscle, which resisted the usual applications for relief; and a few weeks subsequently, an abscess was discovered, pointing about four inches below the shoulder-joint, on the posterior part of the arm; this abscess was punctured, and continued to discharge on her admission into the infirmary. At the period of her admission, she complained of pain shooting from the acromion, downward to about the insertion of the deltoid muscle; her arm was perfectly useless; the motion of the joint was very much impeded, and on every movement the existence of carious bone was discoverable. The superincumbent parts of the joint were much thickened; and from the touch and motion of the limb, I was led to believe that the disease existed chiefly about the head of the humerus. On passing a probe within the orifice of the abscess, I could direct it upward to near the acromion, but never apparently within the capsular ligament. The patient remained for two months under the trial of external and internal remedies without receiving any benefit; the pain and discharge continued unabated, and symptoms of irritation were daily and seriously increasing; from this state, it was evident that death would be the consequence, and that the only chance of preserving life, rested on the removal of the limb; it was agreed in consultation that this step should be prosecuted, and to which the patient consented. I must beg leave to state in what way the operation was performed. The patient being placed in a proper recumbent position, and the subclavian artery being securely compressed in its passage over the first rib, I began my first incision between the head of the humerus and the chest, nearly in a line with the glenoid cavity of the scapula, and carried it downward through the integuments to the under part of the arm, about opposite to the insertion of the deltoid muscle. Having done this, I divided the pectoral muscle upward, when I dis-

sected

sected down to the brachial artery, laying it bare to the extent of more than an inch, and having the arteria profunda in view; I then passed a needle and ligature under the vessel, and secured it above the profunda. The danger of hæmorrhage being now removed, I made my circular incision directly down to the bone, corresponding with the inferior point of the longitudinal incision; I then made a second longitudinal incision at once to the bone, through the centre of the deltoid muscle, from the acromion down to the circular cut, when I dissected back the flaps, and removed the limb by cutting around the capsular ligament, and dividing the tendon of the long head of the biceps muscle. The large muscular branches of arteries were taken up as divided, and not more than eight ounces of blood were lost during the operation.

Mr. Benjamin Bell, in his instructions on this operation, has advised the circular incision to be first made, and the brachial artery to be taken up by the aid of the tenaculum; he maintains, that by this method the operation is more simplified, rendered less painful, and the danger of hæmorrhage diminished; also, that more muscular branches of arteries are preserved for the nourishment of the stump.

Notwithstanding such high authority, it appears to me that security is best promoted by tying the artery at the commencement of the operation; by this mode, the ligature is less likely to be loosened or thrown off by the muscular and elastic action of the vessel; and the artery is less likely to be wounded in dissecting up the inner flap; as to the preservation of more muscular branches, they must ever be sufficiently numerous to afford nourishment for the stump, and to promote the healing process.

The head of the bone was not enlarged, as I had reason to expect; but its whole articulatory surface was in a rough, diseased state; the glenoid cavity of the scapula appeared much less injured, its roughness being chiefly confined along its inner edge; the point of the acromion had a slight degree of roughness.

The poor woman bore the operation with unexampled fortitude, almost without a single expression of pain; and after it, she remained in a very tranquil state.

On the sixth day the dressings were removed, and the stump put on a very favourable appearance; the integuments and muscles seemed mostly to have healed by the first intention; the pain was less, and the discharge better in quality, and not greater than previous to the operation.

On the eighth day, she complained of much uneasiness above

above the supra spinatus muscle; and on examination, there appeared a large collection of pus beneath the integuments.

On the following day, the abscess was punctured, and more than two ounces of matter discharged; the probe was used, but no roughness of the scapula could be discovered. This abscess continued daily to suppurate freely, but still the hectic symptoms were abated, and her strength seemed rather to increase.

At the expiration of a fortnight, I regret to say that my patient altered materially for the worse; her hectic symptoms returned, accompanied with pain about the chest, cough, and an apparent expectoration of pus; she grew gradually weaker, and died on the twenty-fourth day after the operation, from sudden hæmorrhage.

On examining the parts, I found that the healing process had advanced more rapidly than could have been expected; no sloughy appearance existed, but the spine of the scapula in several parts was in a rough state. The ligatures of the muscular branches of arteries were all removed within eight days subsequent to the operation; a fortnight elapsed before the principal ligature was touched; it was then every day slightly lifted with the greatest caution, until the day previous to her decease; this ligature was still found retained, the artery being nearly ulcerated through, without its diameter being in the least contracted. Within the orifice of the artery, a coagulum was loosely attached, about half an inch in length, and not larger in circumference than the body of a barley corn. On opening the thorax, the lungs were found in a very diseased state; many tubercles existed, and ulcerations were extensive. About four ounces of water were found in the pericardium. On the right side of the thorax, between the pleura pulmonalis and pleura costalis, a sac existed, containing not less than a pint and a half of watery fluid; this sac possessed a white, shining appearance, and was much firmer than the usual envelope of hydatids. Could this diseased state of the thorax have been previously ascertained, it would have been highly unjustifiable to have proposed an operation so severe in execution, and so precarious in issue; but, singular as it may seem, no symptoms existed, indicating a collection of water, or an ulcerated state of the lungs; the pulse of the patient had no irregularity, and she had no difficulty in lying on either side; and previous to the operation, she had no expectoration. Here it is right to remark, that a few

few days after her admission into the Infirmary, she was attacked with pain in the chest, accompanied by cough; and which was succeeded by a frothy, mucous expectoration; but for some time previous to the operation, her pain, cough, and expectoration were altogether removed. If this formidable diseased condition of the thorax had not existed, and a coagulum had formed sufficiently firm, on the ulceration of the artery, to have resisted the impetus of the blood, there is some reason to believe that this woman would have ultimately recovered the carious state of the scapula.

A state of rest is the principal consideration to enable the blood to coagulate within its vessels; and this state it is very difficult to obtain in the larger arteries, where the quantity of the circulating fluid is great, and muscular and elastic power are vigorous in action.

After amputation at the shoulder-joint, would it not be advisable, to assist the coagulation of the blood, to have firm pressure made on the subclavian artery in its passage over the first rib, for an hour or more, twice or thrice daily, till the ligature be disengaged by the ulceration of the vessel? I am, &c.

Bedford, May 12, 1805. JOHN PULLEY.

Hints on the early Use of the Needle and Ligature in Hæmorrhages.

To the Editors of the Medical and Physical Journal.

Gentlemen,

I Accidentally observed, in No. 77 of the Medical and Physical Journal, some observations on the account which one of your Correspondents had given of the introduction or invention of the needle and ligature, by Ambrose Paré. It immediately came to my recollection, that I had long ago perused a much more complete and satisfactory account of this invention, in the first volume of Dr. Rees's New Cyclopœdia, under the articles "*Amputation*" and "*Aneurism*," which are generally allowed to have been written by Mr. Blair. If your Correspondents, who have interested themselves in this historical investigation, will take the trouble of consulting the Cyclopœdia, they will find a number of authors referred to by Mr. Blair, who either-

either used the needle and ligature themselves, or described the practice of other surgeons, many years before the time of Ambrose Paré. But, while justice is done to those practitioners, in opposition to the statements of Mr. John Bell, of Edinburgh, who has treated this subject at large, the real improvements of Paré are likewise represented with candour and impartiality. In short, it is my opinion that the Editors of the Med. and Phys. Journal would confer a favour on their Readers by transcribing the "*Historical Sketch of Amputation*," which is contained in the Cyclopœdia, as this great national work is too voluminous and expensive to fall into the hands of medical men in general; and it is perfectly clear, that both the gentlemen who have recently transmitted their remarks to the Editors of the Journal, have never seen what is contained in the Cyclopœdia upon the subject in question. Under the article "*Aneurism*," will be found an extract from Ætius, which proves that the Greeks were acquainted with the practice (lately revived by Mr. Abernethy and others) of tying and dividing the trunk of the artery, above the aneurismal tumour. CHIRON.

Pharmaceutical Process.

Goetling's improved Preparation of Kermes Mineral.

REDUCE separately to powder, and afterwards mix sixteen parts of crude antimony, twenty-four parts of purified potash, and three parts of flowers of sulphur; introduce the mixture into a crucible, and let it enter into complete fusion. After it has cooled, pulverize the mass, and boil it for half an hour in one hundred and twenty-eight parts of water; filter it while boiling through a thick cloth, letting it run into an earthen pan containing one hundred and fifty-six parts of water, and leave it exposed to the air, in a shallow vessel, for two or three days, or until particles of a bright orange colour appear on its surface. Afterwards decant the liquid, wash the deposit in a large quantity of water; then remove it on a filter, and complete the edulcoration; when this is done, dry it by a gentle heat.

This process yields, twelve or fourteen parts of Kermes mineral of a fine reddish brown colour; the whole quantity of antimony, except a trifling residuum of extraneous matter, is dissolved and converted into Kermes, and only a very small quantity remains in the decanted liquor, in the form of golden sulphur.

On

On the Effects of Arsenic in three Cases of Eruption; communicated by J. C. OTTO, *to the Editor of the Philadelphia Medical Museum.*

SIR,

I WAS requested by a young gentleman, to give him some advice and medicine, on account of an eruption that appeared upon various parts of his system, but particularly his abdomen. He informed me, he had been subject to it about six months, and, upon the supposition that it was a trifling and accidental thing, and would disappear shortly, he had done nothing for it, except washing it with a solution of the acetite of lead.

It took place sometimes merely upon rubbing the skin, and would then rise in small lumps resembling mosquito bites, which in the course of the day would subside, except leaving a small vesicle filled with a thin whitish humour. By puncturing the cuticle this was discharged, and the part soon became perfectly well. Sometimes the eruptions would be circular, in the form of small ring-worms, with a space in the centre perfectly free from disease; at others, one small pimple would rise, and be attended with such an intolerable itching that it was impossible to refrain from scratching; in a day or two a number of similar ones would appear around it, occupying a surface as large as a cent. Every form of the eruption terminated in a day or two in vesicles containing a thin fluid, which in two or three more would burst, and the parts would then in a short time become entirely well. No one kind predominated or occupied particular parts, but they were interspersed among each other. At first the abdomen was the seat of the disease, but it gradually extended itself over the lower, and then the upper extremities, leaving the neck and face untouched. Occasionally it would nearly cease to exist upon an arm, a thigh, or a leg, for a week, and afterwards break out with its usual violence. No method of treatment, except the last, had any material influence upon it; the disposition to restoration, that would sometimes take place, appeared to be the effect of accident, for it was never permanent, and would discover itself in a degree, under every mode of cure, and even in the short intervals when no medicine was administered.

I directed the patient to keep his skin perfectly clean, and he has frequently informed me, that, while he was un-

der my care, he changed his linen very often, and washed himself at least twice a week, with Castile soap and water. He was requested to live rather abstemious in his diet, avoiding salted and highly spiced food, and spirituous liquors, and to take a purge twice a week. After persisting in this treatment during five weeks, he called upon me, and mentioned that the disease was no better, and that it began to spread in a considerable degree on various parts of him. I gave him some ungt. hydrarg. nitrat. and ordered it to be applied to the parts affected every evening. After using it for a length of time, without any benefit, it was discontinued, and a strong solution of corrosive muriate of mercury substituted. The result of this application was similar to the preceding, for although the eruptions occasionally disappeared, they still broke out on other parts, so as to exist in an increasing quantity constantly. He afterwards used a great variety of topical remedies with no better success, and at length became afraid that he was infected with the itch; but his alarms were partly quieted, by recollecting that he had not communicated it to any of the persons with whom he had slept. He was notwithstanding anxious for the exhibition of sulphur, and wished to be saturated with it, with which I complied, and directed him to use the ungt. sulph. in the usual manner, after he had taken half a drachm of the flowers daily for the space of a week, but he chose to continue the dose forty days. During a greater part of this period his perspiration was strongly impregnated with the medicine, so as to be disagreeable to himself and others; and finding his situation not to be improving, he relinquished taking it. For a small time he took nothing of any kind, but perceiving the disease to become more general over him, he became exceedingly anxious to have something effectual done, and was willing to submit to any thing that brought with it the hope of benefitting him. I now determined on a slight salivation, to which he readily assented, and preferred impregnating his system slowly, without producing much affection of his salivary glands and fauces. He took a small quantity of hydrarg. muriat. mit. every evening, and in about a fortnight from his commencing it, his mouth became sore, and a salivation ensued; this medicine was still continued in the same dose ten days longer, and then omitted. This treatment was not more effectual in removing his complaint than the former ones had been. The obstinacy of the disease increased his solicitude, and he determined to persevere in the use of medicines of some kind, until a cure could

could be effected. I now directed him to take sulphurated antimony in pills, with a diaphoretic drink; which course he pursued six weeks, when he discovered its inefficacy and discontinued it. A vegetable diet was likewise of no benefit. The Lisbon diet-drink was next resorted to, and taken for three months under every favourable circumstance; but this remedy was not attended with more success than those previously employed. I had read of the influence of arsenic in diseases of the skin, and had witnessed it in two instances. Once in a species of herpes, and afterwards in a large old sore, whose venereal virus had been destroyed by mercury, but whose cure could not be effected by it. As many of the usual remedies had failed in this case, and the round of them nearly completed, I thought proper to resort to this powerful but safe medicine; and preferring Fowler's mineral solution, I ordered ten drops to be taken three times a day for a week. The eruptions then began to disappear fast, and no fresh ones succeeded; and after the disuse of the remedy for a few days, a dose or two were taken daily for another week and then discontinued entirely. The disease now entirely ceased, and the skin became perfectly pure and clear; the small yellow blotches which remained, where the eruptions had been, disappeared in a short time, upon the peeling off of the cuticle. It has been some years since this cure was effected, and my patient has continued ever since perfectly free from his former disagreeable complaint.

During my attendance upon the above person, I was applied to in a case of a similar nature, and prescribed some of the medicines employed in the preceding one, none of which in this instance had any effect, except the mineral solution and mercury. After the solution had been taken a short time, the eruptions entirely disappeared, but returned upon its being omitted. Being obliged to resort to mercury to remove another disorder which he had contracted, it was observed, that the eruptions were removed, after a salivation had taken place a short period, but broke out again when it ceased. Perceiving I was able to suspend the disease, by the use of the solution, I supposed, that, when administered a long time, it would even remove the disposition to it, epecially as some change might have been effected in his habit by the operation of the mercury. Accordingly I requested him to persevere in the use of it a considerable period. Finding himself again relieved for a longer space than he had ever been before, he imagined

he was entirely well, and, contrary to my directions, laid aside the medicine, upon which the eruption again recurred. The yellow fever now occurred and induced him to leave the city, since which time I have never heard of him.

Some young ladies of the Friends Society, who devote much time in relieving the distresses of the poor, desired my attention to a woman, who suffered much from an affection of her face. She said it commenced in June 1799, and was attended with considerable ulcerations; that it varied during the remainder of the year, spreading occasionally over a part of the cheeks and nose, and then nearly disappeared in the ensuing winter. During this period she employed a great variety of remedies, which her friends and acquaintances warmly recommended, but to no purpose. In the spring the complaint increased; and with a view of being perfectly cured, she applied to a physician, who gave her eight small powders of a white appearance, of which she was to take one every week, and confine herself rigidly to a mild diet. The medicine vomited and purged her so severely, that after having taken five doses, she determined to omit them, being so much exhausted by their operation, that she was scarcely able to walk across the floor, and preferred, she said, to die rather than make use of the residue. Her fauces swelled, gums became spongy, and teeth loose, but no salivation ensued; when she discontinued them, her nose and cheeks were rather better, and became entirely well in the fall, remaining however a good deal swelled and of a fiery redness, similar to the appearance that sometimes occurs in the faces of those who have been intemperate in the use of spirituous liquors. Such was the aspect of her face that it was with reluctance she ever left her house, being so frequently exposed to the unpleasant remarks of those whom she would meet in the streets. She remained well one whole year, at the expiration of which she fell down stairs, and hurt her ancle to so great a degree as to occasion it to become ulcerated: when it was almost healed, her face broke out again, her palate became highly diseased, and several pieces of bone came away from the roof of her mouth. Her palate was improved, when I was requested to visit her, March 1802, but her situation in other respects was much more alarming, being infinitely worse than she had ever been; there were considerable ulcerations of her nose, both externally and internally, and a similar affection of her cheeks, occupying one half of the right one, and about one fourth of the

the other, nor did her upper lip entirely escape. The sores were tolerably deep and white at the bottom, with edges that were turned up and hard; the inflammation around them extended to some distance, and was of a bright scarlet colour, attended with such excruciating pain as to deprive her almost entirely of rest. Her state was so deplorable that we were both apprehensive she would lose the greater part of her nose, nor could we form any opinion to what extent the ravages in other parts would proceed. A few of the sores had healed without any application whatever, but were succeeded by others, so that the complaint had considerably increased of late. She was ordered to dress the parts affected morning and evening with lint moistened with sweet oil, and to take eight drops of Fowler's mineral solution three times a day, in a little water. This treatment produced an immediate and rapid improvement in her situation, and was persisted in six weeks, when she became entirely well. Two years have now elapsed since the cure was effected, without the least return of the disease; nor have any ill consequences followed the long continued use of the medicine

---

CASE OF OPTICAL ILLUSION FROM HYSTERIA; *communicated by Mr.* T. BISHOPP, *of Leicester.*

A Single woman, of delicate frame, aged 22, had been much afflicted with Hysteria more than three months. The paroxysms of the disease were often violent, accompanied frequently, but not constantly, with temporary delirium: so that the disease appeared to be well marked, never being preceded by any local irritation, of which the patient was conscious. During some of these attacks she was occasionally so much in possession of the faculties of the mind and of speech, as to be able to reply appositely to questions put to her by the attendants; but of these conversations she retained no recollection whatever upon the termination of the paroxysm. Certain paroxysms were productive of convulsions so violent as to require coercion; while others were attended merely with mild delirium. In the latter, impressions made by surrounding objects upon the retina, were transmitted to the brain, as usual inverted, and were represented to the mind in that position so forcibly, that the young woman could not resist the impulse she felt to place the chairs in the room horizon

horizontally, lest they should fall, finding they would not stand on the other end. She expressed her surprise, and laughed heartily, on seeing the attendants all standing, as she thought, upon their heads. The illusion immediately subsided with the fit, both lasting about an hour generally. This, therefore, was not a singular occurrence in one particular fit, but recurred repeatedly. The whole disease yielded, at length, under my care, to the ordinary treatment of hysteria, no defect either in the organ of vision, or in the faculties of the mind, remaining.

Case of Rheumatism producing Phlegmon.

It is rather taken for granted, than established as a truism, that rheumatism is a specific species of inflammation. There are, however, I apprehend, very sufficient grounds for such a distinction. Nosologists have constantly given it a place among the phlegmasiæ. Depending, like all the other species, for its existence upon the continued action of the proximate cause, it has, in truth, a common claim to such arrangement. But while it exhibits various phenomena in common with acute symptomatic inflammatory fever, as it is called, and that other more chronic form of inflammatory excitement, which is termed hectic fever, it has other properties, which are so many distinguishing marks that are sufficiently obvious, and need not be particularised here minutely. It is the characteristic termination of rheumatism, when seated in a theca or capsular ligament, to throw out serum, together with a greater or less proportion of the coagulable lymph of the blood, and of the proper secreted fluid of the diseased part, forming a matter of some consistence, very different from common inflammatory effusion. The more ordinary seat of rheumatism is in the ligamentous membranes investing both the tendons and the extremities of the bones; it affects also the muscles of the body, the investing membranes as well of the bones generally as of the cavities of the body, if not the viscera themselves. In all these cases, a similar effusion probably occurs in the interstices between the constituent fibres of the part. Suppuration is as rare a concomitant of rheumatic as of arthritic inflammation; and I apprehend that either the one or the other of the latter runs into, or rather is converted into the suppurative inflammation, only when (exceeding its common boundary) it is extended, in a violent degree, to the neighbouring cellular

cellular substance, the common connecting medium of the body, the proper seat of that species of inflammation. That rheumatism is seated in the subordinate arteriæ anastomicæ is, I believe, the general opinion of pathologists, and appears to have more than probability on its side. That the lymphatics, if not the nerves, may likewise be involved in the derangement, no one probably will deny, however he be disposed to refuse his assent to the hypothesis of Dr. Latham upon this point.

That property of certain diseases, which renders them convertible into other diseases of the same class, does not, perhaps, throw any particular light on their essence or specific character in the present state of medicine: yet, as it forms a part of their natural history, it derives hence some importance in a practical view, and should, therefore, be carefully noticed by him who wishes conscientiously to discharge the office of conducting diseases through their natural processes. The conversion of erysipelas into the phlegmonoid inflammation, and vice versa, is an occurrence sufficiently familiar. Erysipelas having attained a certain point, is sometimes overtaken, as it were, by the phlegmonoid inflammation, and the two diseased actions maintain, with some irregularity, their proper characteristics at one and the same time, in one and the same member. But it happens much more frequently in such mixtures, that one of the two morbid actions takes the lead, the other ceasing. A similar conversion with respect to phlegmonous and rheumatic inflammation is a much more rare occurrence. Dr. Darwin talks of the suppurative rheumatism, in his chimerical work, entitled Zoonomia; and other instances of such a concurrence may be found in medical authors. The following is so striking a case of such an hybrid disease, that I submit it to the public eye.

Thomas Ains, aged 16, a thin spare lad, of sanguine habit, after exposure to wet and cold, was attacked, October 10, 1804, with severe pain in one knee, and pyrexia. In about forty-eight hours the knee and thigh had swoln so enormously as to be nearly double its former bulk. At this period violent pain, quickly succeeded by swelling, attacked the other knee; then both ancles, and successively the arms, wrists and fingers. In a few days an abscess was produced on one of the fore fingers, which, on being punctured, discharged genuine pus freely. Now another abscess (preceded by much local pain in the clavicle and shoulder) nearly as large as a hen's egg, arose just above the left clavicle, which, on being punctured, discharged

discharged about two ounces of genuine pus also. It may be remarked, that the latter tumour being seated immediately over the subclavian vessels, had a strong pulsatory motion evident to the eye across the chamber. Not a drop of blood escaped on evacuating it; but at the expiration of about three hours afterwards, eight or ten ounces of blood escaped from the cavity of the abscess, probably derived from ulceration of a small branch of the carotid artery. The hæmorrhage was quickly restrained by the spontaneous contraction of the vessel. The breathing was laborious for several days, accompanied with constant and smart diarrhœa; pulse hard, ranging from 120 to 130. Topical and general blood-letting, relaxants with blisters to the chest, fomentation and poultices, were the principal measures adopted for the relief of the patient, but with so little efficacy that he died on the twelfth day of the disease, completely exhausted, the dyspnœa increasing.

May 6, 1805.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

AS the late plan of treatment recommended so strongly by Dr. Kinglake for the cure of gout, has excited the public attention for some considerable time, I was determined, if ever a case came under my care while I remained in hospital practice, I would give it a fair trial. At length one has presented itself, in which I am happy to say the application of cold proved successful in arresting the progress of this truly harrassing and painful complaint. The reader will observe I have not entered into the labyrinth of hypothetical reasoning, but have confined myself entirely to the relation of symptoms which existed at the time I began this plan of treatment, and those which arose during the process of the cure.

James Cobb, was admitted into the Royal Naval Hospital, June 12, 1805. There appeared great inflammation in both feet, accompanied with considerable tension. The account which he himself gave relative to the complaint was the following. About two o'clock on the morning of the 7th he was awoke by a violent pain situated in the ball of the great toe of the right foot, attended with great inflammation,

flammation, which extended towards the external malleolus of the same foot. This inflammation increased considerably during the day, accompanied with great tension. He had no interval of ease during the following day, and his left foot was attacked on the following morning with the same symptoms exactly that the right one had been attacked with on the preceding. A large quantity of opium was administered by the surgeon of the ship, but without procuring the least ease. He had been attacked twice before, exactly in a similar manner, two years intervening from each attack. During the latter exacerbation he had been attended by an eminent physician, who advised flannels and other warm applications to be applied to the feet, with the addition of stimulating medicines, joined with opium internally. These applications had not the desired effect, as the patient was laid up for seven weeks, without deriving the least benefit. I considered this as a true paroxysm of gout, consequently as a proper case for applying cold, locally. I therefore ordered a pail of cold water to be placed near his bed, and cloths dipped in this to be applied to the feet, and to be renewed every ten minutes, This plan of treatment was begun as soon as the patient was placed comfortably in bed, which took place about six o'clock in the evening. During my last visit, at ten o'clock, I found him in a complete diaphoresis, and his pulse accelerated to 140, extremely full, with great inclination to sleep. This last symptom I consider as totally unconnected with my local applications, it being produced in consequence of his taking an opiate. He pursued this plan of treatment during the night, and through the whole course of the following day and night. At ten o'clock on Saturday morning he sent for me (according to my request) and complained of great pain about the epigastric region. He told me he could not compare the pain to any thing else but as if he had swallowed a portion of any boiling liquid. He also complained of a slight pain situated near the middle of the occipital bone. I ordered him to desist immediately from persevering in the cold applications, and gave him the following medicine: ℞. M. camp. ℥vj. tinct. card. c. ℥ij. ammon ppt. ʒß. M. ft. mist. capt. coch. iij. secunda qq. hora. Sumatur etiam vin. rub. liberaliter. The patient had not taken three doses of this medicine before he found himself perfectly easy and composed. At the time the cold was taken away, the tension, pain, and inflammation, had entirely disappeared in both feet, as not the least trace of this last symptom could

could possibly be detected. He persevered in the use of the medicine and wine; the latter he took to the amount of a pint and a half in the course of twenty-four hours. He now began to eat his food with an appetite, and was able to walk about the ward with the assistance of crutches, on the fifth day after his admission. Towards evening he complained of pain in the right foot, which was unattended with inflammation. I ordered cold applications to be resorted to, and the patient to be confined to his bed. This was continued about twelve hours, when he informed me the pain had entirely subsided. Since this period, which is about three weeks, he has never had one disagreeble symptom, only complaining of a little stiffness about the instep of each foot.

I am, &c.

WILLIAM SHEARLY,

Member of the Royal College of Surgeons, London.

Royal Naval Hospital, Deal, July 6, 1805.

AN ACCOUNT OF A CASE OF HYDROPHOBIA SUCCESSFULLY TREATED BY COPIOUS BLEEDING AND MERCURY. *In Two Letters from* DR. ROBERT BURTON, *of Bent, in the State of Virginia, to* DR. BENJAMIN RUSH, *of Philadelphia.*

[Extracted from the American Medical Repository.]

SIR,

BELIEVING that you are always disposed to encourage any thing which may throw light upon the treatment of diseases, I take the liberty of addressing to you the following case of Hydrophobia, requesting a line or two, if you think it deserving your attention.

On July 4, 1803, at nine o'clock in the evening, I was desired to visit Thomas Brothers, aged twenty-eight years. I was informed by the person who came for me, that he had been bitten by a dog, which his friends suspected to be mad. I found him in the hands of four young men, who were endeavouring to confine him, and thereby prevent him from injuring himself or friends. He recognized me, and requested me to give him my hand, which he made a violent effort to draw within his mouth. Conscious of his inclination to bite, he advised his friends to keep at a distance, mentioning that a mad dog had bitten him.

His

His symptoms were as follow, viz. a dull pain in his head, watery eyes, dull aspect, stricture and heaviness at the breast, and a high fever.

Believing, as you do, that there is but one fever, I determined to treat this case as an inflammatory fever. I therefore drew twenty ounces of blood; and, as he refused to take any thing aqueous, I had him drenched with a large dose of calomel and jalap.

July 5th, four A. M. Finding the symptoms worse, I took away sixteen ounces of blood, and applied two large epispastic plasters to his legs, hoping thereby to relieve the oppression of the præcordia and other symptoms.

Twelve M. Was informed that one of his friends had permitted him to take a stick in his mouth, which he bit so as to loosen several of his teeth. As he craved something to bite, I desired his friend to give him a piece of lead, which he bit until he almost exhausted his strength.

One P. M. Finding but little alteration, I drew eighteen ounces of blood, and had him drenched with the antimonial powders.

Two P. M. He slept until half after three, when he awoke, with the disposition to bite, oppression, &c. but not so violent.

July 6th, eight A. M. Found him biting the bed-cloths; his countenance maniacal, his pulse synocha, with a stricture of the breast, difficult deglutition, laborious breathing, and a discharge of saliva. I took away twenty-four ounces of blood, gave him a dose of calomel and jalap, and continued the powders.

Twelve M. Drew sixteen ounces of blood, and gave him laudanum.

Five P. M. Found him in a slumber; his skin moist, and his fever and other symptoms much abated.

July 7th, eight A. M. Was informed that he had only two paroxysms during my absence, and that he had lost sixteen ounces of blood agreeably to directions. Notwithstanding the favourable aspect which the disease wore, I resolved to bleed him twice more, and then to induce an artificial fever by mercury, which would predominate over the hydrophobic. I therefore drew ten ounces of blood, and requested his friend to take eighteen ounces at night; to rub in a small quantity of mercurial ointment, and to give a mercurial pill every four hours.

July 8th, nine A. M. Found him convalescent, but continued the mercurial unction and pills.

July

July 9th, ten A.M. Found his gums sore, and discontinued the mercury.

July 15th, one P.M. Found him well, but with a considerable degree of debility.

It would be doing injustice to you not to mention that I was indebted to your lectures for the successful treatment of this disease.

August 21, 1803.

To Dr. BURTON,

Dear Sir,

Accept of my congratulations upon your rare triumph over a case of hydrophobia. I give you great credit for the boldness of your practice. You have deserved well of the profession of medicine.

In order to render your communication more satisfactory, permit me to request your answer to the following questions.

1. On what part of the body of your patient was the wound inflicted; and how long was the interval between the time of his being bitten and the attack of his fever?

2. Did he discover any aversion from the sight of water? and did he refuse to swallow liquids of all kinds?

3. What were the appearances of the blood drawn? Did it differ in the different stages of the disease?

Your answer to the above questions will much oblige your sincere friend,

Philadelphia, Aug. 29, 1803. BENJAMIN RUSH.

To Dr. BENJAMIN RUSH.

Sir,

I regret that business of an indispensable nature prevented me from being more particular in my communication. I drew it up in a hurry, intending to transcribe it, and insert such other notes as would throw light on the case; but being called out a few hours before the post set out from this place, I was obliged to forward the communication in the manner in which you received it.

The part of the body of my patient on which the wound was inflicted was a little above the union of the solæus and gastrocnemius muscles, which form the tendo-achillis. The interval between the time of his being bitten and the attack of the fever was twenty-four days.

He

He was, I was told, dull and solitary a few days previous to the attack. A few minutes before it his friends found him two hundred yards from the house, apparently in a deep study. He has informed me, since his recovery, that he had a slight pain in the wound, attended with itching, and an uneasiness in the inguinal gland, several days before the fever.

He refused to swallow liquids, and the sight of water threw him into a convulsive agitation.

With regard to the appearances of the blood drawn, I am sorry to inform you, that after it became cold I did not examine it. I am, Sir, yours, &c.

Bent Creek, Virginia, Sept. 18, 1803. ROBERT BURTON.

To the Editors of the Medical and Physical Journal.

Gentlemen,

As the greatest dissimilarity of opinion exists amongst eminent professional characters, respecting the curative powers of several active medical agents; it might be of considerable advantage to practitioners in general, were the causes of this difference of opinion successfully investigated.

I flatter myself, that with regard to some of the remedies above alluded to, my researches have not been altogether without effect. Having frequently experienced the most beneficial results from the use of conium maculatum in preternatural enlargements of various parts of the human body; and as this herb has been as much recommended by some, as decried by others of equal rank and respectability as physicians, I make choice of it as an example.

Conium is an herb which requires not the chemist's art. Its virtues are concentrated in the expressed juice of its leaves, or by an infusion of the herb in boiling water. Thus prepared, it will be found capable of exerting all its energy; whether used internally, or externally applied. Whoever uses it in either of these forms, will never afterwards be inclined to trust to the extract of the plant; which is always divested of the volatile parts, on which its discutient property seems to depend. But the great source of error in regard to this vegetable, which has frequently

quently deceived those who prescribed it, is the ignorance of the people employed to gather it. Those unacquainted with its botanical characters, frequently get the chaerophyllum instead of the conium. This has been remarked by the ingenious translator of the Edinburgh New Dispensatory. When this mistake takes place, it sufficiently accounts for the apparent want of efficacy in the plant. Let those therefore, who have despised this active remedy, only procure it genuine; let them use it in its simplest forms, and persevere a few weeks in its use; and then, if they find it inefficacious, let them report it to the medical world.

The following case, in which it produced the most astonishing effects, will serve as an additional proof of its great powers.

W. P. a person between forty and fifty years of age, formerly of an extremely robust habit, capable of bearing the greatest excesses and fatigues, had the venereal disease repeatedly. The symptoms were in general removed by drastic remedies; principally of his own prescribing. The last time, he caught the disorder in the form of gonorrhœa virulenta. He took calomel mixed with some purgative pill. The discharge from the urethra ceased, and has not since returned. In June last, it being several months after he was apparently cured, his throat became ulcerated, and his skin was partially covered with venereal blotches. He applied to me, and the above named symptoms were removed by mild mercurial medicines and the decoction of the woods. One of his testicles now began to swell, that enlargement was speedily removed by the ordinary means. He then had pains similar to those caused by acute rheumatism; these alternated with soreness of the throat and blotches on the skin. In October, the disease seemed nearly taken away. In January, his testicle began again to swell; and together with the spermatic cord, &c. it became more than four times its original size. The parts were extremely hard, and he had so much pain as to preclude the possibility of taking any repose, although opium was given in large doses. An eminent surgeon was called in. Discutient topical remedies were used, and mercurials and anodynes given internally. After a considerable time, no advantage was gained. Green hemlock was then with difficulty procured. A strong fomentation was made with the roots. It was applied several times a day; and after each fomentation, a poultice made of bread-crumbs, water, and the young shoots of the herb. In less than a week he

passed

passed comfortable nights. The swelling began to abate. The remedy was used six weeks. At this time the parts seem in their natural state, and no symptom of lues has appeared, unless we suppose the pain he has in his joints to arise from latent venereal virus. This may be the case; but if we judge from the symptoms, dolores artuum, musculorum tractum sequens; sub motu praesertim aucti; artus debiles, rigidi; it must be called rheumatism.

I am, &c.

Nottingham, May 26, 1805. JOHN WHITLAM.

An Account of the Plant Krameria Triandria of Linnæus; *extracted from a Dissertation on the Subject, first published in Vol. I. of the Memoirs of the Royal Academy of Medicine of Madrid, and republished by the Author, (in* 1799, *at Madrid,)* Don Hypolito Ruiz, *First Botanist of the Expedition to Peru, &c. &c. Communicated by* Mr. Leonard Gillespie.

THE shrub called Ratánhia by the Spanish inhabitants of the province of Huánuco in Peru, and the root of which is named the Root good for the teeth in Lenice, and the neighbouring provinces, is the Krameria foliis oblongis obovatisque, corrollis tetrapetulis, Linnæi. Flor. Peruvian. et Chil. tom. i. page 61. Icon. 93. Memor. Reg. Acad. Matrit. vol. i. p. 364.

This plant is the spontaneous growth of many provinces of Peru, delighting in a dry sandy soil, exposed to the intense heat of the vertical sun of that climate. The author of this Dissertation, discovered the plant in 1779, in the provinces of Tarma and Xauxa; in 1780 he found the same plant in the provinces of Huaorcheri and Huánuco; and in 1784 he met with it in the province of Canta, when he first became acquainted with the medicinal virtues of this simple, his curiosity having been excited by seeing some females use a species of root as a tooth brush, which on inquiry he was informed was the Ratanhia or root used for the teeth, used from time immemorial by the native Indians and Creoles, to cleanse the teeth, to fasten them, and at the same time to give a fresh colour to the gums and lips.

Don

Don Hypolito Ruiz having prepared an extract from the root of the krameria, found it to possess a degree of astringency superior to that of the tormentilla, bistorta, or alchemilla, or to that of any other simple known in the Materia Medica. He first essayed the use of this extract, in the case of a child of eleven years of age, who had been afflicted with hæmorrhage by the mouth and nose; and notwithstanding the use of the usual medicines in such cases, the flux had continued with the total prostration of the strength of the patient; a drachm of the extract dissolved in two ounces of water, with the addition of a little distilled vinegar, administered to the pâtient, had the effect of completely stopping the hæmorrhage, and in three days the patient was perfectly restored to health. In three obstinate cases of uterine hæmorrhage, the administration of this medicine was attended with the happiest effects. The good effects of this extract were also manifested in ulceration of the gums and mouth, in laxity of the gums, and in restraining the hæmorrhage from recent wounds, to which it was externally applied in the form of powder; and mixed with resinous substances, it was found an excellent application to ulcers in a detergent state but which were prevented from becoming cicatrized by relaxation.

The root of the Krameria was found to answer the purpose of a tooth brush extremely well, deterging the teeth, and by its powerful astringency rendering the gums firm, and of a healthy appearance. The dose of the extract generally used by the eminent physicians of Madrid, who made use of it, and whose names the author of the Dissertation makes use of in testimony of the truth of his statement, is, for a child of ten years and upwards, from one scruple to two; and in an adult the quantity of half a drachm to a drachm, dissolved in rose-water or common water, to which is added a small quantity of distilled vinegar.

The author asserts, that in some patients affected with hæmorrhage, one dose of the extract was sufficient to stop the effusion of blood; in others, the second dose had the desired effect; whilst few patients required the administration of a third dose. A decoction of the root or of the bark of the ratanhia was found to have the same effects as the extract.

The author cites, in support of the virtues attributed by him to this simple and its extract, the authorities of a long list of physicians of Madrid, who made use of this medicine,

medicine, together with a list of persons of rank who had profited by the use of this remedy; and amongst the former is mentioned Dr. Don Jgnacio Ruiz de Luzuriaga, Court Physician, and well known to the writer of this article, as an experienced physician, a man of great veracity, and a Graduate of the University of Edinburgh.

The sensible qualities of the root, bark, and extract of the ratanhia certainly denote a very strong degree of astringency in this simple, and are sufficient to recommend the notice of it, as likely to prove a useful addition to the Materia Medica, although the author of the Dissertation has perhaps, like most other discoverers, raised the merits of his discovery and the virtues of this Peruvian simple far above their real value. The extract is prepared near Lenice, and imported in considerable quantities into Spain, together with the root and bark. A small quantity of each of these articles, together with the Dissertation, were lately presented to John Turnbull, Esq. Chairman of the Merchants trading to the Streights and Spain by Don Joaquin M. Ferrer, a Spanish merchant; and it is from the politeness of Mr. Turnbull, and his desire to promote the art of healing, that the present account of this Dissertation, and the new remedy it describes has had its origin.

HISTORY OF A CASE OF TETANUS, *in which large Quantities of the Tincture of Cantharides were ineffectually employed; by* JOHN REDMAN COXE, M. D. *of Philadelphia.*

ELIJAH DUNN, aged fourteen years, was admitted on the 7th of June of the present year, into the Pennsylvania hospital, for an injury just received by a fall from a horse. A wound on the inner side of the right tibia, nearly two-thirds the length of the limb, and of considerable depth, together with one on the outer ankle of the left leg, but little more than skin deep, formed the extent of the accident. Both wounds were dressed with sutures and adhesive plasters, to favour union by the first intention. No fever or inflammation supervened; and the pain, considering the extent of the injury, was moderate. As he was bound in his bowels, on the 9th he took an ounce of Glauber's salts, which operated plentifully. The wounds were examined on the 13th, but no union was observed, and the discharge was profuse, but not purulent.

On the 14th, one drachm of bark with ten drops of elix. vitriol. were ordered to be taken three times a day; and the wounds were dressed morning and evening with poultices sprinkled with laudanum; by the 17th, the wounds assumed a more healthy appearance, granulations began to rise, but were soft and rather of a pallid hue, the discharge was thin and white, and a cicatrix had commenced. At this time he observed a difficulty of moving his lower jaw, but gave no information of it until the 18th, when the bark and vitriol were omitted, and one grain of opium was ordered three times a day, with a quart of white wine in the twenty-four hours. The disease seemed stationary till the 20th, at which time he opened his mouth with difficulty, and complained of stiffness of the muscles of the neck and abdomen,) which last were now nearly as unyielding as a board,) with slight spasms thro' the day. The wine appeared to exhilarate, and keep him free of that violent pain at the scrobiculus cordis, in general so severe in tetanic patients. The opium was now increased to a grain every two hours, and the wine ordered ad libitum. Spirit of turpentine was applied to the wounds, but excited no pain. It was then applied boiling hot, and even mixed with salt once or twice, with scarcely a sensation of pain. In the evening the symptoms had increased; thirty drops of tincture of cantharides were now given every hour, till he had taken four doses, when violent pains of the stomach and strangury, rendered its exhibition improper. The symptoms abated from the time this effect took place; but a tightness at the region of the stomach continuing, induced me to order a mustard poultice, with relief. Cantharides in powder were applied to the whole surface of the wounds, in hopes of exciting a more vigorous action in the languid vessels, but without effect. The pulse was increased in frequency, but diminished in force.

21st. The symptoms of strangury, &c. no sooner subsided, than the tetanic symptoms recurred, with permanent contraction of the muscles. The pulse beats 120, and weaker, and a degree of risus sardonicus exists. The jaws were close contracted,* and the head was drawn considerably

* Although his jaws were closed when awake, yet in sleep a complete relaxation of the muscles took place, the jaw falling upon the breast. But the tongue, which was perfectly still when awake, was, during sleep, in a constant state of spasmodic action, resembling the motion of the tongue of a snake. This was not however invariably the case.

siderably backwards. Ordered to apply flour of mustard to the sores, and take every two hours ten drops of tr: cantharidis in a glass of wine; continue the opium every two hours, and inject at the same interval of time, thirty drops of laudanum in two ounces of wine diluted with water up the rectum. If no effect is produced by the mustard, apply the butter of antimony to the sores.

22d. The butter of antimony was partially applied last night, and repeated this morning; the pain was considerable, but the action of the vessels was so torpid, that the slough was not separated for several days. The symptoms have abated: about three pints of wine have been taken by the mouth, and in the injections, and about ℥ij. of tr. of cantharides, producing a slight stranguary and pain of the intestines. He had one considerable convulsion last night, after which he slept a little.

23d. Last evening had a violent convulsion. His pulse is fuller, and his face is flushed, apparently from the wine taken; in swallowing his medicines, &c. he is obliged to be turned upon his belly, resting on his elbows, his head being drawn backwards considerably; and he is obliged to swallow slowly, to prevent a regurgitation of the fluid through the nostrils. He cannot now take the solid opium, I therefore ordered fifteen drops of laudanum every two hours in his wine; and as he has had no stool since the 19th, the wine injections were omitted for the present, and a common purging enema was administered. He passes his urine more frequently, but in smaller quantity and high coloured, with some scalding; it is, however, under his perfect control. The sores are tender, with a slight discharge. Continue the wine and laudanum, and increase the cantharides to thirty drops. If the strangury is not increased by the evening, apply a large blister to the region of the pubes. His food is chiefly panada, made rich with wine.

24th. The rigidity of the muscles is now universal, tho' he suffers but little pain, except when a violent convulsion seizes him, when his cries may be heard at a considerable distance. His mouth is opened with difficulty, and he bites his tongue frequently during sleep. Pulse 108; he slept tolerably; the glyster operated well yesterday, and the wine injections were resumed at five P. M. He does not retain them well; I therefore ordered them in diminished doses; viz. ℥ß of wine and as much water, with forty drops of laudanum. About a quart of wine has been used since yesterday. The blister was applied as directed, and

rose well, with considerable pain, but no increase of strangury. Ordered fifty drops of tr. of cantharides, and thirty of laudanum every two hours.

25th. Butter of antimony was applied this morning over the whole extent of the sores, producing great pain of short duration; skin is generally moist, and he appears slightly better, opening his mouth wider.

26th. Half past nine. The symptoms were aggravated; about five last evening a violent convulsion seized him. He does not take as much wine as is desirable. Slight spasms attack him every five minutes; a miliary eruption has appeared, chiefly about the neck and body; pulse varied much during the day, sometimes full and slow, at others, weak and frequent. Pledgets of linen constantly wet with brandy were applied to the sores. A glass of wine was ordered every hour, and the tinctures of cantharides and opium as before. If no effect occurs by noon, give fifty drops of laudanum every hour with the wine, and fifty drops of tincture of cantharides. Increase the laudanum in the glysters to fifty drops.

By noon the increased doses were commenced, and persevered in, till he had taken about four hundred drops of laudanum and as much cantharides, and half the quantity by injection. At six P. M. a violent convulsion attacked him, lasting half an hour, and he began to grow comatose, with now, (eight P. M.) a degree of stertorous breathing, and that extreme irritability produced by laudanum, awaking if touched, in convulsions, and affected with frequent tremors. No relaxation of the jaws; the pulse is good. Ordered to omit all his medicines, to apply a large blister over his head; and if the symptoms of coma, &c. increase, give ʒss of white vitriol and as much ipecacuanha in divided doses, to excite vomiting. Should the convulsions increase by ten o'clock, dash over him two buckets full of cold water, and repeat it if serviceable, every two or three hours.

27th. ten A. M. Blister drew well. The attendants kept him constantly awake, and in a few hours the effects of the laudanum subsided, though he yet continues very drowsy. The jaws are still close, but on the whole he seems better. He makes water often, but in small quantity, with some scalding, and high coloured, which is all the tendency to strangury that has occurred since the first doses of cantharides. The tr. of cantharides was again resumed in doses of *one hundred* drops every hour, until by six P. M. he had taken *one thousand* drops, *without the*

slightest

slightest effect apparent. It was therefore discontinued altogether. Wine was ordered ad libitum in the evening, and fifteen drops of oil of amber to be given every hour, augmenting each dose; he took but one dose, as he said it nearly strangled him, and would not try a second.

28th. This morning he began early the use of volatile alkali in doses of five grains every hour; three or four doses have been taken without any visible effect. He had one violent convulsion last night and two this morning, at other times remaining free of pain though quite rigid, and having frequent twitches of the muscles. The sores are more inflamed around the edges, with considerable pain when touched, the sensibility appearing to be perfectly morbid. During the night the urine came away involuntarily. He has now, however, the complete command of it. I now determined to try cold water by affusion, in which I was sanctioned by Dr. Rush, who came in at this period; his pulse was 104, and tolerably vigorous. At noon a bucket full of cold water was poured through a cullender over him as he lay in bed, on an oil cloth, and he was suffered to remain in it for two minutes before he was wiped; he said it felt cool and comfortable; the rigidity of the muscles appeared to abate, and a glow of heat succeeded. The eruption, noticed on the 26th, had now extended itself to the thighs. I ordered the cold water to be continued every two hours, increasing the coldness and quantity if it proved useful. These favourable symptoms continued for about half an hour, but the disease appeared to return with redoubled violence, especially on attempting to drink, which nearly strangled him, and prevented the use of any thing but a little wine. The use of the water was suspended. At eight P. M. the pulse flagged considerably; I ordered the wine to be continued ad libitum, with thirty drops of laudanum every two hours; to rub in ʒß of strong mercurial ointment every hour into the thighs, and five grains of calomel every two hours into the gums.

29th. The laudanum last night gave him almost immediate relief, and he dozed, without spasms during the night, being awakened regularly to take his medicines. Butter of antimony was applied last evening, but only partially, as it gave him exquisite pain, and appeared to augment the spasms. The sores have a sloughy appearance; continue to wet them with the spirits. The eruption has increased since yesterday, some being of the size of a small pin's head and filled with a whitish matter. Urine

is passed without much difficulty or scalding, in larger quantity, and less coloured. A pulsation of the heart, which was first observed three or four days ago, has become very violent, and is visible at a considerable distance from him. It was remarked to be always greatly increased during his convulsions, but it is now more uniform. The pulse both here and at the wrist beats about 112, but is strongest in proportion at the heart. He swallows with more ease this morning, and the muscles of the back appear less rigid, as the arch formed when he is turned on his face to drink, is less than heretofore, and he now can drink slowly when lying on his back. His gums seem slightly affected by the mercury, of which he has taken about ℥ß. and nearly half a pound of the ointment has been faithfully rubbed in. As he had had no stool since the 23d, I ordered a common glyster, which operated once very copiously, with apparent benefit, the spasms recurring less frequently, and he can open his mouth nearly one half inch. The muscles of the body generally, are more relaxed, so as to give great hopes of a favourable issue. I prescribed thirty drops of laudanum every hour, to continue the ointment every two hours, and desired the calomel to be omitted.

At two P. M. there was a remission of all the symptoms, and he seemed apparently better than he had been since his first attack; his spirits were high, and he eat voraciously. Appearances continued thus favourable till about six P. M. when, in the act of drinking, a most violent convulsion seized him, in which his body was bent nearly into the form of a semi-circle backwards; the muscles of the neck were particularly affected. This convulsion lasted without any abatement for about an hour, his face becoming very livid and respiration very torpid; the pulse at the wrist being scarcely perceptible, whilst the convulsive motion of the heart was greatly augmented; and at seven o'clock death released this unfortunate victim from his accumulated sufferings.

Dissection.

At ten A. M. of the 30th, fifteen hours after his decease, the body was opened, the muscles remaining still rigid, though several purple blotches over the body and extremities, appeared to denote the tendency to putrefaction. The abdomen was much distended from flatus in the alimentary canal. The adipose matter was very small, the fœtor considerable. Of the omentum, scarcely any thing remained

mained but a thin transparent membrane. The stomach externally was sound, but internally were several small appearances of inflammation, especially near the pylorus. It contained the panada he had last taken, mixed with mucus, in about three-fourths of a pint. The spleen was altered slightly in its colour, being of a deeper leaden hue than natural. The liver was sound; the gall-bladder large and distended with yellow bile, which had tinged the adjoining parts very considerably. The kidneys and ureters were sound; and the bladder, containing about two ounces of urine, was contracted, and its coats thickened, especially at its fundus. No inflammation appeared in it. The thoracic viscera were sound, except the heart, which appeared to be smaller than usual, and to be still under the influence of that spasmodic action which existed so powerfully in his last moments. The carnæ columnæ especially appeared to be in a state of strong contraction, being permanently rigid, with none of that flaccidity, which might have been expected so long after death had taken place. The blood was not in coagula, but dissolved like molasses, as in animals killed by lightening, appearing to indicate, that the whole muscular fibres of the arterial system had partaken of the general spasmodic action.

On examining the throat, &c. the œsophagus was perfectly sound, but the *epiglottis and trachea were highly inflamed, especially the last, increasing in redness as we approached to the lungs.*

In the course of the disease, the patient took about 2400 drops of tincture of cantharides, about 2000 of tincture of opium, besides the quantity used in the glysters, and nearly three gallons of wine.

I do not recollect any case recorded of dissection after death from tetanus. It remains therefore to be ascertained by future observation, whether inflammation of the trachea always exists. From the neck being a part generally first affected in this disease, we might à priori judge this to be the case. One circumstance to be remarked however is, that in the above case no difficulty occurred in swallowing fluids, (except that only a small portion at a time could be taken) which might not have been expected, considering the highly inflamed state of the adjoining parts.

As all the muscles partake of the spasmodic action of this disease, even the bladder, intestines and heart, may we not reasonably conclude, that the arteries partake in common of the same state, in a greater or less degree?

Will not this state of the arteries, account for the apparently weak and quick pulse, which is common in tetanus, and which is seldom excited to febrile action and fulness, even by the largest doses of wine and laudanum? And may we not hence also explain the great tendency to solution of the blood, which is noticed in this disease? What would be the effect of bleeding in small quantities, and gradually increasing the quantity drawn, in removing this spasmodic state? Would not a vigorous action of the vessels be thereby excited, and an inflammatory crust produced on the blood; as has been observed in some very malignant cases of fever, where the depressed pulse and dissolved blood have gradually given way to violent action and sizy blood, requiring a continuance of the use of the lancet with greater freedom, to subdue this more active, though less dangerous state of fever.

Is it not probable that the strangury (except in the very first instance) was owing to the disease, and not to the medicine taken, as it was always very trifling, even under the large and repeated doses of the tincture of cantharides? And has not this medicine rather proved beneficial by the inflammation it excites in the stomach and bowels, than by its action on the urinary organs? for otherwise we must suppose the strangury from the medicine and from the disease to differ greatly in their effects upon the system.

August 1, 1804.

To Dr. BATTY.

Sir,

THE enclosed letter from Thomas Bennion, Esq. Garrison Surgeon of Gibraltar, I received two days ago. We have had but very scanty accounts of the disease which so fatally raged there; this account therefore, though imperfect, may perhaps be acceptable. An account from Mr. Bennion must be particularly interesting, as he was surgeon of the 10th Regiment while the disease raged, and it will be recollected that the mortality in that regiment was so very much smaller than in any other corps in the garrison. See the account published in the Medical and Physical Journal, by the Ordnance Surgeon at Gibraltar.

I am, &c.

Windsor, July 4, 1805. JAMES M'GRIGOR.

To Mr. M'GRIGOR.

Sir,

The Garrison is now perfectly clear of that cruel disease which proved so fatal both to the soldiers and to the inhabitants here. You ask me, what the disease is, or to what class it belongs? I have never been in the West Indies, or on the continent of America, I consequently cannot positively say that it was the yellow fever; but it appeared to me, to be that very disease as described by authors, particularly by Dr. Chisholm. It likewise often appeared in the shape of a disease which you and I saw often in Egypt, the plague; but I shall give you some description of it, and will divide the symptoms as they appeared, into two stages.

In the first, the patient is seized without any previous notice, with giddiness, pain of the head, slight sickness at stomach, darting pains from the head to the back, and spasmodic affection of the calves of the legs. Sometimes there were rigors, and in several cases the sickness at the stomach did not come on for some hours after the first attack. The breathing was very hot, there was incessant sighing, the greatest dejection of spirits, with apprehensions of the most distressing nature. The patient said he felt as if severely beaten; the fear of death is very great, and friendship for the nearest kin is extinguished. The tongue was at the beginning very white; a bad taste was complained of; the sense of smelling was imperfect or depraved; the visage was extremely distressed; there was an unwillingness to speak, a desire to remain in a horizontal posture, and great tottering on any attempt at motion.

The countenance on the first attack became suddenly sallow; in the course of a very short time however it became red, full, and bloated, with the exact appearances of intoxication. Drowsiness and sleep followed in a few hours, when a little moisture came out on the skin; this appearance at this stage was however delusive, and often deceived the practitioner. It suddenly left the patient, and was succeeded by the most intense heat, that gave a smarting sensation to the fingers when applied to the skin. There was at this time a most uncommon and offensive smell from the whole body. The eyes were now much inflamed, there was violent pain in the temples and over the arches of the eye-brows, darting to the orbits.

The pulse from first to last was greatly increased in quickness; in some it was rather hard, though in more it

was

was small and soft, and never so strong and firm as in inflammatory diseases.

The thirst was less than it is generally in acute diseases. There was a strong pulsation of the carotid arteries, and an evident enlargement of the jugular veins.

The colour of the skin at first approximated to that of the lilac, cocklicoque, violet or poppy, and changed as the disease advanced to a deep dark yellow. By the administration early of strong emetics and purgatives on the first attack, the yellowness seldom appeared, and every other bad symptom was averted.

When these had not been exhibited; and in some cases, where the disease from first appeared in a more aggravated form, the second set of symptoms, or what I called the secondary, soon appeared; the patient was very comatose, there was much tremor of the limbs, frequently an incessant vomiting of a black matter, with a convulsive hiccup. The eyes were drawn in a direction alternately from the nose to the temples in the most frightful manner, with nearly a total blindness.

The skin was now parched up with a burning heat, or covered with a clammy offensive sweat.

The body was covered with petechiæ and vibices, swellings appeared under the arm-pits and groins, which frequently degenerated into large abscesses. Foul gangrenous sores appeared on the back, and carbuncles were seen on different parts of the body. There were hæmorrhages from the nose, ears, mouth, and pores of the body, with every appearance of a total dissolution of the blood-vessels. Then the fæces and urine were passed involuntarily, and the other usual symptoms indicated speedy dissolution.

As to the nature of this disease we were by no means agreed; different medical councils were held in the garrison, and at first it appeared to be the opinion of a majority that the disease was not contagious; a fatal opinion to be acted on, as subsequently appeared.

I arrived here a few days after the disease made its appearance, and of course, could not give any opinion about it, until I had thoroughly seen the disease and enquired into its history. General Barnett again strongly urged us to say whether it was contagious; alas! I soon discovered it to be the nearest relation to the plague; some cases from first putting on the appearance of this disease, others of the typhus gravior, and others of the yellow fever.

As to the mode of treatment, that which I followed is very simple, and is soon described. I have little to remark on

on the plans of others; it is known that they were not equally successful. Some of our ablest men were inclined to interrupt the course of the disease but little, and gave little but diluents and cordials. Others bled very freely; and others gave the bark very liberally and early.

My mode of treatment was as follows. My first step was invariably to put every patient into a bath, which was generally warm; when taken out, the body was well rubbed with soaped flannel, and then he was put into bed. If the powers of life were strong, an emetic solution was next given, of Tartar emetic and Glauber salts. This solution generally operated pretty smartly both on the stomach and bowels; and when it did its office well, I have frequently had little more to do but to remove debility, the patients being often well on the third day. If the solution, persevered in for some time, did not operate, which was frequently the case at first, the stomach and bowels being very insensible, I gave calomel, and continued giving it either by itself or with jalap, or with the compound extract of colocynth. I endeavoured by all means to keep up the alvine discharge; when obtained, the patient was found perfectly relieved, and free from fever. If not, the fourth or fifth day generally put an end to all enquiry. But in many, no evacuation could be procured by any means; in others there was a violent diarrhœa.

I dissected the bodies of a few; the general appearances were, the destruction of the internal coat of the stomach, inflammation and ulceration of the intestines, sometimes of other of the abdominal viscera.

I have little more to say, than that after procuring evacuations, I prescribed saline medicines when little fever remained; but when the disease continued after the third day, it frequently turned out to be the severest typhus. I then found the greatest benefit by Dr. Carmichael Smyth's mode of treatment, as laid down in his book on the Winchester fever. Opium or bark did not succeed; when liberally given, I perceived them evidently doing mischief. The ship is getting under way, and I must conclude.

Your's, &c.

THOMAS BENNION.

Gibraltar, April 8, 1805.

To

On the Restriction of Variolous Inoculation.

To the Editors of the Medical and Physical Journal.

Gentlemen,

Among the various causes which have tended to bring discredit on the practice of vaccine inoculation, one is the little attention which has been paid to producing the genuine vaccine vesicle. It is not much to be wondered at that errors were committed at the commencement of this practice; but there was reason to hope, that in a course of seven years every medical practitioner would be sufficiently acquainted with the process to guard against being guilty of any very glaring blunder.

I am sorry to find that much misconduct and want of due care are still to be met with. A boy has lately been brought to London, secured, as his friends thought, from the danger of small-pox; for he had been inoculated with cow-pox matter in March last, by a surgeon in the country. A few days ago an eruption of papulæ appeared upon him, which his parents mistook for the small-pox. This led to an examination of his arms, on which there remain not the least vestige of inoculation; no mark, no indentation is to be seen, even through a magnifying glass. His parents were of course informed, that though the present eruption was not variolous, their son was by no means secure from the infection of that dreadful malady.

This morning's papers announce a Resolution of the Royal Jennerian Society to endeavour, either by application to parliament or by other means, to procure the restriction of the practice of variolous inoculation, or the adoption of such measures as may be found necessary to prevent the spreading of the casual small-pox from such inoculations. The utility of some measures for preventing the propagation of this disease has been often urged. Dr. Haygarth, some years ago, published a very valuable work on the possibility of exterminating the small-pox by proper regulations, and by preventing the diffusion of the contagion. It is evident that the introduction of the Jennerian inoculation would render such a measure much more practicable. Restrictions and regulations have been wisely enjoined by the legislature to prevent the introduction and communication of the plague and yellow fever, and

Mr. Ring's Case of Confluent Chickenpox.

and measures have been advantageously adopted on a more confined scale to prevent the spreading of infectious fevers, &c. in close and crowded neighbourhoods.

If the Committee of the Jennerian Society possesses, or can procure, any well authenticated instances of the diffusion of variolous contagion from those who have been inoculated, the publication of such proofs, specifying those who had the disease severely, and those who died of it, would tend very much to convince the magistrates, public officers, and the people at large, of the propriety and necessity of such restrictions. It would probably be no very difficult undertaking, particularly in the villages round London, to trace the small-pox through many patients to its origin in an inoculated child.

How dreadful a responsibility rests upon those who carelessly and wantonly expose their families and neighbours to the infection of this most loathsome and malignant enemy of the human race.

July 10, 1805. S. M.

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

THE following is an explanation of the drawing, which I some time ago transmitted to you, representing a case of confluent chicken-pox. It occurred in a boy about four years of age, the son of Mr. Warren, at No. 6, Husband Street, Carnaby Market. It was seen by Dr. Denman and Mr. Newby; both of whom declared, that they had never before known a case of chicken-pox attended with so copious an eruption. The drawing was made by that celebrated artist Mr. Edwards, from the back of the child, about the sixth day of the eruption; and a few vesicles which appear below the large drawing, were taken from another child in the same family, who had the same disorder in the usual manner, at the same time; partly for the sake of shewing the more common appearance of the chicken-pox, and partly for the sake of proving that the confluent case really was that disease. Dr. Willan has a drawing of a case of chicken-pox, in which the eruption is still more numerous, but smaller and less confluent.

Mr. Warren's son had been vaccinated some time before

fore; and when the chicken-pox broke out in so formidable a manner, it was mistaken for the small-pox. On this account, I was informed of the case. His mother told me, that when this eruption first appeared, he was scarcely recovered from the measles; and she was of opinion, that the chicken-pocks succeeded in every place where the measles had before appeared.

I am, &c.

New Street, Hanover Square,
July 16, 1805.

JOHN RING.

To the Editors of the Medical and Physical Journal.

Gentlemen,

In the year 1801, Dr. Chrestien, of Montpellier, published a work, entitled, "A Treatise on the Inoculation of the Small-pox, with some reflections on that of the Cow-pox," in which are the following remarks:

" Dr. Tandon, a physician of long experience, informs me, that in the year 1749, at least six thousand out of thirty-two thousand persons, of which the population of this city consists, died of the small-pox.

" The claveau sur les moutons, which may be called the sheep-pox, resembles the small-pox in its symptoms, its progress, and its mortality. I have frequently inoculated sheep with it, and with success.

" I have only seen a co-existence of the small-pox and the measles three times. Authors furnish us with a number of examples. The most remarkable are those related by Bergius; who says, 'Seven children were inoculated at Stockholm at the same time, and in the same house; when the measles prevailed in that city, and attacked them all nearly at the same period. The eruption of the measles took place in one before, in others at the same time, and in others after that of the small-pox, without any unfavourable event.' In these cases, when the measles appeared first, they suspended the small-pox; but when the small-pox appeared first, it did not suspend the measles."

Dr. Chrestien inoculated himself in the arm with ovine matter; and excited a pustule, with pain in the throat and chest; acute, but of short duration. The exsiccation of the pustule was complete, within three days from the time of inserting the matter. He says, "No prudent man will repeat

repeat this experiment, the sheep-pox being frequently mortal, and producing its effects particularly in the wind-pipe and the chest, where they occasion a considerable suppuration; as I have learned by opening a number of sheep, which have died of this disease.

"Many years ago I inoculated two sheep with variolous matter, and an eruption was produced; nevertheless, when exposed to the infected flocks, they caught the distemper."

When Dr. Chrestien published his Treatise, he was not perfectly convinced of the full advantages of vaccination; but his doubts are stated with great moderation and candour.

In your Journal for September, 1802, is an account of some experiments made for the purpose of proving, that the small-pox is a disease common both to men and brutes, by Professor Viborg, of the Veterinary College at Copenhagen. It there appears, that the Professor produced a local infection in lambs, but could not produce a general eruption. In sheep he could not produce even a local infection, notwithstanding he had attempted it by repeated experiment. He nevertheless was of opinion, that it was possible to be done. The experiments of Dr. Chrestien prove this opinion to have been well founded.

Prof. Viborg observes, that it is interesting to examine the relation between the sheep-pox and the small-pox; to ascertain, whether the small-pox can be prevented by the inoculation of the sheep-pox; and whether the sheep-pox can be communicated to the human species, and to other animals. This question also is now decided, as far as relates to the human species; and in a way that must deter any rational man from trying a similar experiment.

Two other cases of the small-pox have occurred since my last communication, in patients vaccinated by me. One of them is a child of Mr. Pearse in Great York Mews, Baker Street, who was inoculated four years ago, with matter taken on the tenth day. I have long avoided to take matter at so late a period; but at the same time must acknowledge, that in this case I frequently saw the pustule, which appeared perfect, and to go through its regular course.

The subject of the other case is a child of Mr. Stokes, No. 12, Orange-court, Swallow-street, whom I inoculated five years ago, at a time when it was not thought of much consequence at what period matter was taken, provided a pustule, resembling a vaccine pustule, took place. Such a pustule

a pustule took place in the present instance, and afforded matter for a considerable number of other successful inoculations; and those who were thus inoculated, have resisted the infection of the small-pox. I cannot, therefore, but consider it as having been a genuine case. The small-pox, in this instance and the former, as well as others, is so very benign for the natural sort, that I conclude it is modified and mitigated, though not totally prevented, by the preceding vaccination.

In the last Number of the Medical and Chirurgical Review is the case of a daughter of Mr. Scott, No. 28, London-street, Fitzroy-square, who is there said to have been brought to the Small-pox Hospital on the 5th of May, with an eruption which had every appearance of the small-pox. It is also stated, that she sickened on the Tuesday preceding, and continued ill with fever until Thursday, when she had a slight fit; that on the following morning the eruptions appeared; and that the disease was caught from a younger child, then recovering from the small-pox, who had been inoculated at the Small-pox Hospital.

This statement is partial, and liable to mislead. It is true, the younger child was inoculated at the Small-pox Hospital; it had the disease in a very severe manner; and I expressed my surprise at hearing that the mother frequently carried such a dreadful object through the streets to the Small-pox Hospital: on which she informed me, that she carried it *under her apron*. Hence it appears, that these masses of contagion, which have so justly been compared to foxes with firebrands at their tails, are carried through the streets of the metropolis more frequently than the public suspect; and the danger is aggravated by concealment. It is therefore imprudent to let other children be carried abroad in this town or its vicinity, till after inoculation.

I shall now add some further particulars, respecting the case of the child who had been vaccinated, and in whom the varioliform eruption appeared. These particulars were communicated by the father and mother of the child.

The small-pox on the younger child had been very thick and confluent, and great numbers of the pustules broken at an early period, while the fluid they contained was watery. The other child played with him, and for many nights lay with him, while he was in this state; of course, she must have had active variolous matter applied to her in a variety of modes: First, directly from the infant; secondly,

condly, from the sheets in which they lay; and, thirdly, from the hands of the mother, who nursed them both.

The following is a memorandum of the particulars of the case, made on the afternoon of the same day on which she was carried to the hospital; and taken from the account given to me by the parents.—On Tuesday, April 30th, Grace Scott appeared indisposed. *At the same time she complained very much of her eye; beneath which a scratch appeared. The eyelids swelled more and more for the space of two days; and she was in great pain.*

"On the Friday following, two eruptions appeared on the scratch; and another in the same direction; and at the same time smaller eruptions began to appear in different parts of the body."

These eruptions turned *on the fourth day.* They appeared to me to be no more than miliary eruptions, such as occurred in the case of Mr. Grant's child, related by Mr. Goldson, or in the case related by Dr. Rollo. They never became pustular; nor appeared to contain any fluid; of course, they were not small *pocks.* They will serve, however, as well as the best, for the Medical and Chirurgical Review; where it has too long been the custom to bring forward every thing which appears after vaccination, bearing the least resemblance to the small-pox, in order to prejudice the public.

As one proof of this, a case is published in the same number with the preceding, in which it is said, "the arm inflamed regularly, and the patient sickened on the 8th or 9th day; and continued to be very ill for two days. A copious *rash* came out; but went off in a couple of days. The arm is now scabbed; and there are marks of *two or three pimples* on the margin. The scab is *circular,* as *dark in colour as the vaccine;* but *neither so large, nor elevated above the surrounding skin. No pustules appeared on any part of the body.*"

It is well known, that the scab here described is common in those who are put to the test after vaccination. It is also well known, that when those who have had the small-pox or the cow-pock are put to the test of variolous inoculation, a local pustule is sometimes produced, attended with constitutional indisposition, and followed by a rash, or an eruption of pimples. But it is an abuse of language, an insult to common sense, and an injury to the cause of truth, to call such an eruption *pocks* or *pustules.*

As to the eruption in Mr. Scott's child, it was seen on the fourth day by Mr. Sarjeant, of Prince's Street, Caven-

dish Square; who declared, that had he been called in to the case without being informed of the small-pox having been in the house, he should not have considered it to be of the variolous kind.

Mrs. Scott herself, who was as much indisposed as her daughter, had fourteen *pustules;* several of which were large; but others were ruptured at an early period by nursing her children. She declares that the eruption in her daughter totally disappeared in six days.

It is rather surprising, after all that has been done, said, and written, that the public in general, and even some members of the medical profession, appear to be still ignorant of the local as well as constitutional effects, which are sometimes produced by the mere contact of variolous matter. In addition to the very considerable number of instances of this kind, which I have already published, I now beg leave to state the following.

Mrs. Young, No. 8, Exeter Place, Brompton, having a nurse-child, in whom, after vaccination, some pustules broke out round the mouth, in consequence of being suckled at the same breast with her own infant, when labouring under the small-pox; I remarked, that the same thing takes place, in some instances, from the application of variolous matter to the skin of those who have had the small-pox. To this she replied, that she knew it very well; for when she nursed her former child in the small-pox, her fingers were so affected by handling the matter, that all her nails came off.

Mrs. Cottis, of Great York Mews, Baker Street, from the same cause, had seven pustules on her face, and one or two on her arm, although she had had the small-pox before; and this second eruption was attended with considerable constitutional indisposition for many days. She had a violent pain in her head, back, and limbs; great fever, and intolerable thirst. Yet the eruption was evidently local.

Mrs. Read, of Fulham, who had also had the small-pox before, when nursing her child in that disorder, had nine large pustules; some of which were very painful. Her face swelled, and she was almost blind three days. She had also a violent sore throat.

Mrs. Watts, of Fulham, had the small-pox severely when four years old, and was in great danger of losing her life by the disorder; nevertheless, when lately nursing her child, she again had a considerable number of pustules, attended with great swelling and inflammation of the

the face. She was extremely ill; and obliged to keep her bed two days, and to have medical attendance.

These cases, if there were no others on record, ought to inculcate a little caution, in judging of the occurrence of the small-pox after vaccination. But, in order to strengthen my argument, I shall add one more: the same which I alluded to in my letter to Mr. Grant of Portsmouth, as noticed by Mr. Goldson. It occurred in a child of Mr. Merriman, of Queen Street, Berkeley Square; who has favoured me with the following particulars.

The child was vaccinated in September, 1802, at the age of a month; and the vesicle went through all its stages in the most regular manner. There was but little constitutional indisposition; yet sufficient to satisfy Mr. Merriman, that she was secure from the future infection of the small-pox. Several children were inoculated from her, all of whom had the genuine cow-pock; and, after the scab fell off, a proper indentation was left on the arm.

In March, 1803, Mr. Merriman inoculated her with variolous matter, in order to put her to the test. On the second day a small eminence appeared, which increased till the ninth, when a severe shivering took place, followed by so much fever, as to cause an alarm. This, however, began to diminish on the next day.

At this period there was a considerable cluster of pustules round the inoculated part; and an eruption of about ten other pustules, if they deserved that name, in different parts of the body. These soon maturated, and most of them died away in three days; but one or two remained for five days.

Twelve or more medical friends, among whom were Dr. Jenner and Mr. Ring, saw the child under these circumstances; who agreed with Mr. Merriman in thinking, that the eruption was merely the effect of cutaneous irritation, and not the small-pox. Nevertheless, in order to decide this point, matter was taken from one of the pustules, and inserted into the arms of two children, who had never had either the small-pox or the cow-pock; but it produced no effect.

It was remarked by several medical gentlemen, particularly by Mr. Hemming, that the scab, formed in this case, was very different from that which takes place in the ordinary inoculation of the small-pox; and it is observable, that the indentation so nearly resembles that which is left by the inoculation of the cow-pock, as to be scarcely distinguishable from it. The arm continued sore for some

 weeks

weeks; with a free discharge of matter. The event of this case has ever since deterred Mr. Merriman from putting his vaccine patients to the test of variolous inoculation.

"Subsequent occurrences have proved, that this child's skin is peculiarly irritable. The ulcerations remaining after a blister, which a severe illness rendered necessary, could not be healed, by the greatest attention, for a considerable space of time. On this occasion also, there was an eruption of pimples, by no means confined to the vesicated part."

While I thank Mr. Merriman for this case, which he was so obliging as to communicate at my request, I beg leave also to acknowledge the valuable information I have received from perusing his remarks on that subject, just published; and his able vindication of the practice.

If we cannot prove vaccination to be perfect and infallible, let us at least recollect, that no other practice is perfect or infallible. If a few spots now and then appear on the bright orb of this new-discovered luminary, let us recollect, that the sun itself has a few spots.

> ——— nitent ubi plurima, non ego paucis
> Offendar maculis.

I shall here add some other instances of failure in the inoculation of the small-pox; a practice which it has been so much the fashion of late to represent as infallible.

A child of Mr. Hookham, in Old Bond-street, was inoculated for the small-pox, and supposed to be safe from future infection; but afterwards had the disorder in the natural way.

A child of Mr. Butts, a broker in Oxford-street, near Blenheim-steps, was inoculated for the small-pox when three months old. The arm rose, and she had several convulsive fits previous to the eruption, which left pits behind. Nine months after, she caught the small-pox; and had it so severely, that it was with difficulty she recovered. No one who sees the marks remaining from this last attack, can doubt that the disease really was the small-pox.

Mrs. Fennel, of Fulham, mother of Mrs. Watts, whose case of local small-pox, in an uncommon degree, is before related, informed me of an instance of a young woman, who, on coming to London, many years ago, was inoculated at the Small-Pox Hospital, and supposed to have the disorder in a regular way. She afterwards lived in service at Mr. Twigg's, in Gutter Lane, where she caught the small-pox, and died of it.

Mrs.

Mrs. Linforth, at No. 63, King-street, Golden-square, informed me of a young woman, who had been inoculated in the country, and lived with a grocer in Swallow-street, to whom the same melancholy event occurred.

But I have now before me a letter from the Rev. Mr. Jenner, written on the 4th of last June, in which he mentions a more recent case. This happened about the same time when a similar case occurred in the family of the Earl of Westmeath.

" Miss Price, niece of Mr. Whitebrook, wine cooper, in Greek Street, Soho, was inoculated for the small-pox, when an infant, by the late Dr. Barwis, of Devizes, at the time of a general inoculation. She had the disorder in a satisfactory manner; and some marks of it are still visible in her face.

" About the latter end of April she sickened; and had a pretty full eruption of the natural small-pox; of which she is just recovered. Her mother, from the recollection of her daughter's having the small-pox by inoculation, could not be convinced that this last eruption was the small-pox, till its complete character put the matter beyond dispute.

" Upon inquiry, I found she had the chicken-pox when a child; and, without this evidence, it is not probable Dr. Barwis could have been mistaken in the matter he took, when the small-pox prevailed in an extensive district. The period between the first and second cases of small-pox was eighteen years.

" In this instance, the disease was caught by receiving money from the hand of a child labouring under the small-pox,—*probably one of Mr. Travers's Firebrands.*

Dr. Becu, professor of physiology at Wilna, who has just left this metropolis, after residing here several months, informed Dr. Jenner of two cases of the small-pox a second time. The patients were attended each time by the same physician, who was a man of the first eminence.

Dr. Becu also informed me, that the small-pox has proved extremely fatal in his father's family. Eight of his brothers and sisters fell victims to that dreadful distemper; and he himself narrowly escaped. One brother only remained, whom Dr. Becu has rescued from the ravages of that devouring pestilence by vaccination. Such was the auspicious dawn of the practice in Lithuania; where this learned and enlightened practitioner has vaccinated almost two thousand persons with his own hands.

I am, &c.

New Street, Hanover Square. JOHN RING.

To the Editors of the Medical and Phyſical Journal.

GENTLEMEN,

THE following case appearing to me and others, who were witnesses of it, to be one which has not before been taken notice of; you will oblige me by giving it a place in your useful Miscellany, that the public may be aware of the possibility of it, and by their united wisdom devise means of prolonging to society the lives of perhaps some useful individuals.

J. M. aged 22 years, a private soldier, was admitted into the General Hospital here on the 4th of July, labouring under Cynanche Tonsillaris; he had been four days ill and had taken no medicine whatever, not having been reported sooner.

His skin was at this time hot, his pulse pretty quick, and rather small, and he was costive; he breathed with some difficulty, though the tonsils and uvula were inconsiderably swelled. He appeared as if frightened, and said he never remembered being ill before, which seemed to account for it.

A saline laxative medicine was administered, and a blister was applied to the external fauces. Being visited in the evening, he said he was much better, but spoke in a hurried manner, and seemingly in terror, as in the morning; his breathing was not relieved, though he persisted in saying he was much better; the medicine had operated several times. On inspecting the throat, the tonsils and uvula were not observably altered. His skin still continuing hot and his pulse quick, he was ordered a diaphoretic mixture, composed of aq. ammon. acetat. & vin. antim. The morning following (5th of July) he was much worse. His countenance had a remarkable dejected appearance; I think it might be compared to the countenance often observable on the accession of a bad case of typhus fever. His pulse was small and labouring, his throat externally somewhat tumefied, occasioned probably by the blister; his inspiration was performed with the greatest difficulty,* the expiration almost imperceptibly, it was so very quick; and both together produced a remarkable sound,

* But I observed he did not attempt to assist, it by putting his hands on his head or laying hold of any part of the bedstead, as asthmatics are sometimes observed to do.

sound, which induced the belief that the trachea might be the seat of the disease. On attempting to swallow any fluid, part of it was immediately ejected through the nose, and most part of the remainder after a short time; it is even probable *none* reached the stomach. Inspecting the throat internally, the uvula and tonsils were certainly larger, but in the opinion of several medical gentlemen present, by no means so much as to account for the very great difficulty of breathing observable; on the uvula were perceived some little asperities, as if it had burst and discharged some fluid. Bronchotomy, or (speaking more correctly) tracheotomy, was now thought of, but rejected upon the supposition that the trachea was affected perhaps to the lungs. The uvula and tonsils were pierced, but without any thing being seen to discharge; he was directed to inhale the steam from warm water with some vinegar, and a large blister was applied to his neck posteriorly; he had been rather purged since the laxative was given the preceding day.

He died that evening apparently suffocated, it being the *sixth* day of his illness, and the *second* of his admission into the hospital.

On examination of the parts by dissection, the submaxillary glands appeared somewhat enlarged; one of the tonsils and the uvula were in a state of suppuration, but the pus too viscid to flow out; their size by no means great; the velum pendulum palati seemed thicker than natural; but the EPYGLOTTIS was considerably *enlarged, inflamed,* and in a *partial state of suppuration,* containing *viscid pus,* as before-mentioned, found in the uvula and one of the tonsils.

Every one present* agreed that this was sufficient to cause the difficulty of breathing and consequent death of the man. The parts contiguous were however examined, viz. the glottis, and all the parts contained within (or behind) the thyroid cartilage, and they were not diseased; the trachea was particularly noticed to be in a healthy state. The thorax being opened, the lungs appeared natural; but on pressing them, froth mixed with blood issued from the trachea; the consequence, of course, of suffocation.

If, contrary to my supposition, such cases as the above have been before related, I crave pardon of you, gentlemen, and of the public, for having obtruded this; I also beg excuse for its being related thus briefly, as I am not

 conscious

* Chiefly gentlemen of the medical staff.

conscious of having omitted any thing that might lead to the discovery of the disease in future. An ingenious person might liken the sound I have mentioned, as occasioned by the difficulty of breathing, to something familiar, but I really cannot think what to liken it to; however, I can safely aver, it was *not* like the ringing of a brazen tube; the similitude to which is mentioned by most authors as accompanying cynanche trachealis or the croup. The manner it was treated I by no means lay down as the best possible, were the disease known. I am sensible it may be deemed omissive; some may think bleeding ought to have been performed; but the pulse, during the *two days* he was in the hospital, did not authorize it, nor was the only inflammation visible at all alarming; and I must again repeat, that what caused the difficult respiration was not known: all I can say is, that with a strict adherence to truth, I have *simply* related the different particulars as they occurred; and all concerned in the treatment of the case will, I know, be glad if even by their errors being pointed out, others may be served. Many modern medical writers could, I make no doubt, with the above materials, form a small volume, and doom the unfortunate reader to be tossed through seas of irrelevant and extraneous matter before he should reach the much desired port of useful information; and often has it been the cause of much wonder in me, when perusing the works of one of these literary spiders, that the subject by being so unconscionably stretched through many pages, (perhaps some volumes) with various angles and contortions, has not at last been rent, and the unwary author assumed, instead thereof, *politics*, or some of the *fashionable topics of the day*. But lest I should myself err in like manner, I will here conclude; and am, &c.

Cork, July 10, 1805. LODGE HALL,

Licentiate of the Royal College of Surgeons, in Ireland.

(Medical Staff.)

To the Editors of the Medical and Physical Journal.

GENTLEMEN,

ON reading Dr. Lang's "Observations on the Management and Preservation of the Eyes," in your 77th No. p. 11, I was reminded of the case of a gentleman, who a few years

years ago became blind of one eye from some obscure cause. On covering that eye only, and suddenly opening it, no contraction of the pupil was discoverable, as would be supposed: but on covering both eyes, and suddenly exposing them to the light at the same instant, there was not only the usual contraction in the perfect eye, but a manifest contraction in the blind one; which will, perhaps, be allowed to be an additional confirmation of Dr. L's position, that there exist a "sympathy and close connexion of our organs of sight, &c." But the management he recommends for the preservation of the eyes, not coinciding with my experience, I am induced to lay it before you, and, if approved, ye are at liberty to insert it in your publication.

Many years ago my eyes became very tender, probably in consequence of much reading; so that I could not bear to read or write long together without some contrivance, especially if the paper were very white. In this state I found, if I placed the book, or paper, between me and the window, or candle, it was less tolerable than when the light came sideways, or partly from behind: this I account for from the light's being more directly reflected from the paper into the eyes when coming in the first direction; and though my sight of late has improved, I still find the front light less pleasant; and presume that most persons, who are much affected by a strong light reflected from white surfaces, will be very sensible of the difference, and that the present mode of sitting with the left side to the light in writing will still be found most advantageous; for thus the eyes will receive less reflection from the paper than even when the light comes from the right. I own with Dr. L. that in a side light, more rays generally fall on one eye than on the other; but this, if painful, is easily guarded against by a shade, as the hand placed on that side of the face, the elbow resting on the desk, or a candle-screen; for this purpose I prefer the green silk, called Persian to oiled paper, that colour being very friendly to the eyes: yet I found spectacles of green glass not answer the purpose, chiefly from their causing, when removed or not looking through them, every object to appear of a reddish hue.

Being disappointed of getting green plate glass, I had recourse, for relief from the whiteness of paper, to pieces of thin horn, such as are used for lantern lights, and held them upon the book in reading, which I found of some service. I afterwards got the horn stained, by a silk-dyer, of a beautiful light green, which answered extremely

tremely well. On using this, I was still more sensible of the preference due to a side light; for when placed between me and the light, the reflection from it was very troublesome. I found *that* horn answer best for staining, which is the most free from colour. When my eyes became so strong as not to be in much need of it, I sometimes laid it on the part of the page where I was not reading, or on the other page.

But as blank paper reflects more light than letter-press, the tender sighted, who write much, will perhaps be equally desirous of knowing how they may obtain relief. At first, on using thin writing paper, I put black or green paper under it; but this not answering well, and still worse when the writing paper was thick, recourse was had to another device. A piece of green cloth was pasted on a thin board, 12 inches by 8, in the middle of which an opening was cut 8 inches long and 1 broad, so as to allow of writing two lines; then, by drawing down the board about half an inch, one line remains in sight to direct the penman in writing the next at a proper distance, and so on to the bottom of the page; thus, instead of the eyes being exposed to 60 or 100 inches of white reflecting surface, it is exposed to only 8 inches; and this may be further reduced if the writer will be at the trouble of making use of ruled or black lines. The green cloth, in order to completely cover half a sheet of fool's-cap paper when writing at the top and at the bottom, must necessarily extend 8 or 9 inches above, as well as below, the board. That part of the board, which must slide over the newly written part, should be hollowed out underneath, to prevent the writing from being blotted; or that part of the board, namely, from the opening to the top, may be entirely cut away, and a cross piece laid over, and the cloth over the whole. The upper edge, at least of the lower side of the opening, ought to be pared very thin, so that the pen may not go against it in writing.

This hasty sketch, for relieving my medical brethren and other literary characters that are afflicted with great sensibility to light, will probably be considered as trifling by them that have strong eyes; but I flatter myself it will prove useful to the former, should they be induced to put it to the test.

Lancaster,
13th of 7th Month, 1805. JONATHAN BINNS.

OBSERVATIONS

Observations on Mr. Cribb's Singular Case of Delivery; *communicated by* Mr. Dawson, Surgeon, *Sunderland.*

Conjectural remarks, offered in a manly and modest way, on seemingly anomalous cases, are, in my opinion, ever laudable, provided the writer does "not extenuate, or set down aught in malice," and bears in mind the following line:

Vox veritatis, ad cælum volat.

They have the effect of producing discussion; may do good; and if properly conducted, can never do harm. Mr. Cribb's singular case of delivery will be the subject of a few remarks. I think it may be easily simplified, notwithstanding its seeming singularity.

I proceed to do this confidently, and without any apology; I believe none to be required; I am actuated by the love of science, and by no wish to cavil, or hurt the feelings of any man or men.

To me, Mr. Cribb's case appears founded on misapprehension; a misapprehension, which, under similar circumstances, many men might have fallen into. I thus simplify this "singular case of delivery." It was neither an imperforated, nor an united state of the sides of the vagina, but merely an unnatural thickening, and resisting state of the membranes investing the fœtus! This may seem a bold assertion; let me shew it to be almost incontrovertible by attending circumstances. Mr. Cribb says, "On examining, I found a large and hard tumor pressing very low down, and covered by an unusual substance, which felt soft and uneven to the touch."

The hard tumor was doubtless the child's head; the unusual substance, unquestionably, the membranes covering it. Again, "by the yielding of the bones to a moderately firm pressure, there was but little doubt of its being the head of a child; and I could also feel the sutures, though but indistinctly." This is a still more convincing proof, that the "unusual substance, which felt soft and uneven to the touch," was the investing membranes. Had it been, according to Mr. Cribb's opinion, an imperforated vagina, or more correctly speaking, had the surfaces of the vagina been united in consequence of ulceration, and subsequent granulations, he could hardly have felt the sutures of the cranium, as in all human probability there would at least have been half an inch in length of the sides of the vagina united.

united. And again, "neither the *os uteri*, nor *the arch of the pubis were* to be felt." This further corroborates the idea I have ventured to form; the head had passed into the brim of the pelvis covered by the membranes, and completely wedged up the vagina; hence the hand could not pass; and this circumstance fully accounts for Mr. C's finger passing "*readily* into the rectum in every trial."

After this supposed union of the vagina, in consequence of a former parturition, the patient menstruated, and was afterwards impregnated. Now we know very well, a female could not menstruate with an impervious vagina! And we have not now to learn, that a woman cannot be impregnated without semen reaching the vagina, or the uterus! If this female had an impervious vagina, how did she menstruate? and how, which is still more remarkable, did she conceive? The latter circumstance could never take place in a woman with an impervious vagina! The mother thought her "daughter just as *she* was." The woman herself seemed to have no suspicion to the contrary. She had a husband too; did he find any obstacle to coition? This is not mentioned. The probability is, he did not. The fact appears to me to be as follows: The woman in no respect differed from any other, but in a *surprisingly thickened, unnatural, and resisting state of the membranes.* Mr. Cooper had not examined *per vaginam*; at least, he did so under a full conviction of the vagina being impervious. This fact is too notorious to be questioned, as, during the introduction of a catheter, he fancied the vagina to be impervious, and afterwards would not give credit to the pregnancy of the patient. Still the membranes resisted; still pain forced the head of the child downwards into the brim of the pelvis. At this time Mr. Cribb examined, felt the head of the child and the sutures indistinctly, by moderately pressing "an unusual substance, which felt soft and uneven to the touch," the investing membranes. This toughness of the membrane, though rare, is possible. I have heard of some who, at times, used an instrument for the purpose of perforating them.

If what I have stated should, to a thinking mind, appear doubtful, I beg leave to adduce other circumstances to prove the probability of my positions. In the case in question, did the liquor amnii ever escape? Could Mr. Cooper ascertain the rupture of the membranes? Clearly not! If the liquor amnii was known to escape, or the membranes to be perforated, by this gentleman, then the idea of an impervious vagina falls to the ground. For, how

how could fluid pass out of a tube that was impervious? And if the liquor amnii did not escape, and the membranes were not ruptured, does not this afford a striking proof of what I have asserted? Mark the consequence; the membranes were perforated with a bistoury, and in due time the woman was delivered! She died too; this was no uncommon event; the consequence of constitutional irritation produced by a violent and long continued labour! I request these remarks to be considered by others as merely conjectural; in my mind, however, they bear great plausibility. Did I think the perusal of this paper would offend any of the ingenious gentlemen concerned in the case, I would commit it to the flames; but I conceive this to be impossible. I have advanced nothing theoretical; I have carefully reasoned on facts related by the Reporter of the case. The opinions I have formed of the case, I purpose to maintain. If any gentleman will convince me I am wrong, I will most willingly relinquish it. Here mere *ipse dixit* will do nothing; we must have strong and sterling facts. The man who convinces me I am wrong, must first prove to me, beyond a doubt, how a woman could menstruate, and conceive, with an impervious vagina! The gentleman who does this, will receive my sincere thanks.

July 6, 1805.

Report of M. DUPUYTREN, *Anatomical Professor in the School of Medicine at Paris, in the Name of a Commission, composed of Messrs.* CUVIER, LEROY, BAUDELOCQUE, and JADELOT; *respecting a* FŒTUS, *found in the Body of a Youth of Fourteen Years old. Extracted from the Bulletin of the Society.*

AMIDEE Bissieu, in whose body the fœtus was found, had complained from a very early period of his existence, of a pain in the left side, which soon assumed the form of a tumor. These symptoms continued, without producing any material injury to the health or faculties of the child, until he had attained his 13th year, when he was suddenly seized with fever. From that period the tumor increased in size, and became very painful; after a few days, his stools were observed to be fœtid and puriform. At the termination of three months from this attack, he evidently laboured under a species of pulmonary consumption. Shortly afterwards,

afterwards, he voided by stool a ball of hair; and at the end of six weeks, he sunk under his complaints.

On the body being opened by Messrs. Guérin, aud Bertin, there were discovered in a sac, attached to the arch of the colon, and communicating with it, some balls of hair, and an organized mass, somewhat resembling a human fœtus. The connection between the habitual indisposition of young Bissieu and his disease is obvious, as well as that betwixt the disease and the appearances on dissection. The first point being ascertained by authentic documents, it became of the greatest importance to determine the position of the organized mass, and the situation in which it had been evolved.

From a careful inspection of the parts sent to the society by M. Blanche, surgeon, at Roûen, it clearly appears to have been contained in a cyst, situated in the transverse mesocolon, near the colon, and without the canal of the primæ viæ. The cyst indeed communicated with the intestine; but this communication was recent, and appeared to be in a great measure accidental; as the remains of the separation between the two cavities were still evident.

The true position of the organized mass being determined, it was next desirable to ascertain its nature. In its form, we discovered many points of resemblance with the human fœtus; but we likewise observed various particular dispositions, some of which appeared to belong to a defective conformation, and others to the derangements successively occasioned by time, and by its retention in the mesocolon.

It is evident, however, that if this production possessed a system of organs independent of those of the body to which it was attached, it must necessarily be regarded as an individual being; but that, on the contrary, if nothing could be discovered but a continuous organization, it ought to be referred, whatever might be its external form, to the class of tumors which originate in every part of organized bodies. The dissection of this mass, performed with the greatest care and accuracy, discovered traces of some of the organs of sense: viz. a brain, a spinal marrow, and large nerves, muscles degenerated into a kind of fibrous matter; a skeleton composed of a spine, a head, a pelvis, and the rudiments of the limbs; lastly, in a very short umbilical cord, inserted into the mesocolon without the cavity of the intestine, there were found an artery and a vein ramified at their respective extremities, both towards the fœtus, and towards the individual to whom it was attached.

tached. The existence of the preceding organs clearly demonstrates the individuality of this organized mass, although it was destitute of those of digestion, of respiration, of urine, and of generation; but the absence of these organs, necessary to life, ought only to make us regard it as one of those monstrous fœtuses destined to perish at the moment of birth.

The existence of an organized mass in the mesocolon being ascertained, and its analogy with the human fœtus determined, it still remained for us to inquire how long it had existed, and in what manner it had been evolved, and nourished in the body of another individual.

This fœtus being found without the alimentary canal, it could not be introduced into the body of the young Bissieu after birth; a circumstance which overturns a great many of the hypotheses, by which it has been proposed to explain this phænomenon. The sex of Bissieu, which was carefully ascertained by Messrs. Delzeuse and Bronard, by order of the prefect of the Eure, precludes all idea of fecundation; nor could the youth be self-impregnated, since he was provided with male organs alone, and did not exhibit the smallest trace of those of the other sex.

The facts which form the basis of this report, lead naturally to very different conjectures. The indisposition to which Bissieu had been subject from childhood, the nature of the symptoms of this indisposition, as also those of the disease which immediately succeeded it, as well as the appearances discovered on dissection, are so closely allied, that we are forced to acknowledge there must exist between them a necessary dependance, and to conclude that this unfortunate young man had brought with him into the world the cause of the disease which cut him off at the end of fourteen years.

Many other facts concur to prove, that the fœtus must have existed for a long time in the body of the young Bissieu; such as the size of the teeth, the fibrous degeneration of the muscles, the induration of the brain, the abrasion of different portions of skin, the carious state of several bones, the anchylosis of others, the ossification of the cyst, &c. But admitting that the existence of this fœtus was coeval with that of the individual to whom it was attached, it will still be difficult to explain why it should have been situated in the transverse mesocolon.

The facts detailed in this report are unquestionably the most important part of it, and are, to a certain extent, independent of any explanation which we may venture

to

to propose. It necessarily however became an object with your commission, to endeavour to discover in the facts themselves, an explanation of the phænomenon. We frequently meet with twins, connected by the back, belly, head, or other parts of the body. A certain degree of compression, exerted by the organs of the mother, either at the time, or immediately after conception, may probably occasion these, or similar monstrosities. In other cases, not less frequent, twins are found so identified, that several organs wanting in each, are re-placed by others common to both. In the former case, the monstrosity is owing to a cause purely mechanical, and in the latter, to a radical defect in the organization of the germs. In order to explain the phænomenon, which is the subject of the present report, we must necessarily have recourse to one or other of these causes. Thus, in the case of Bissieu, either one or two separate germs must have penetrated the other in consequence of some mechanical action; or from an original disposition, for which it would be as difficult to account, as for many other circumstances connected with generation; they must have always existed in the same relative situation in which we found them. One of these explanations being admitted, the existence of a fœtus in the abdomen of an individual is no longer a matter of great surprise; and the sex of that being, who for so long a time performed the functions of mother, becomes nearly a matter of indifference. This fœtus may be compared to the fruits of extra uterine conceptions. In fact, to whatever part of the abdomen the fecundated germs are attached, their mode of nutrition is the same; in every situation they absorb nourishment by means of their own vessels; they increase in size until the term fixed by nature for their expulsion; if this be not effected at the appointed time, they putrefy, are converted into fat, shrivel, ossify, or else, by the irritation they produce in the neighbouring parts, an abscess is formed, through which they may be expelled. In the present instance, this had in some degree taken place; the sides of the cyst inclosing the fœtus, had inflamed, as in other cases of extra uterine gestation; the inflammation had extended to the intestine; the partition which separated the two cavities had been destroyed; a communication had been formed between the cyst and the colon; pus and hair had been passed by stool; and a complicated phthisis had finally terminated in the death of the patient.

Had the fœtus been placed nearer the surface, most probably

bably the cyst would not have opened into the intestine, and this phænomenon, without any change in its nature, would have appeared less extraordinary.

This fœtus must have received nourishment during the whole life of the individual, who may be regarded in the light of its brother; the preservation of its body from putrefaction, and the circulation of blood through its organs, leave no room for hesitation on this head. The want of the organs of digestion, of respiration, generation, &c. afford no objection to the vitality of the fœtus, since these organs, simply nourished in ordinary fœtuses, do not exert their functions till after birth. Farther, the life of this fœtus must necessarily have consisted of a small number of functions, on account of its particular structure; the organs of circulation alone performed all that was necessary to the vitality of the other parts. They received and returned the blood from the mesocolon to the fœtus, and from the fœtus to the mesocolon. H.

Observations on recent Depressions of the Skull, unattended with Symptoms. *By* G. P. Dawson, *Member of the Royal College of Surgeons in London.*

As no less than four cases of fractured skull, with depression, have made their appearance in the course of the the 13th volume of the Medical and Physical Journal, and as one of these cases seems to inculcate a different practice from that of the other three, it may perhaps be pardonable to offer a few remarks on this species of injury. This consideration is the more necessary, as from the various opinions of authors, and the diametrically opposite methods of treatment proposed by some of the first practitioners in this country, a young surgeon must necessarily feel at a loss to decide on that particular practice he ought to pursue. He may respect all these surgeons, but he cannot believe them all to be right; and while his ideas on this subject are 'wavering and doubtful,' it is hardly to be expected he can act with that promptness and decision which cases of imminent danger most unquestionably demand. It is the conviction of this, and the wish to remedy it, which has given origin to this paper. I have not the vanity to pretend to teach, I only wish to stimulate the industry of others. I shall confine my observations under

three distinct heads. First, I shall state the treatment recommended by three very celebrated surgeons, men of acknowledged eminence, whose opinions must give weight to any practice, each of which differ considerably. Secondly, I shall make a few observations on the four cases of depression, published in this Journal, by Messrs. Snow, Pitt, and Goddard. And, thirdly, I shall combine these detached cases with the practice I have seen, heard, and read of; and having commented on the treatment of these surgeons, draw my conclusions accordingly: not, as I have already said, to instruct, but to offer food for discussion, and induce so interesting a subject to be resumed by an abler pen.

In the prosecution of this inquiry it will be superfluous to mention names, or to speak of the practice, in depression, with symptoms; here, there neither is, nor indeed can be, diversity of opinion: all must concur, in one general voice, that the use of the trephine is indispensable. But we are to consider how far the use of that instrument is necessary in cases of depression, unattended with symptoms. To assist us in this consideration then, we are to hear what three famous surgeons say. The first surgeon tells us, in recent cases of depression unattended with bad symptoms, the operation should be performed; that this practice is vindicable on two accounts; first, though there are instances of recovery in such cases, yet when the injury is neglected, and the patient happens to live freely, it is no unusual thing to see inflammation supervene some time after the accident; secondly, long pressure on the brain is apt to derange the functions of this organ.

So much for the first surgeon; and now for the directions of the second, who informs us, that in cases of depression without symptoms, and an external wound, there is no occasion to operate; but should there be depression with a wound leading down to it, then the trephine should be applied.

Let us now hear what the third surgeon says. "Whenever the patient retains his senses perfectly, I should think it improper to trephine him, unless symptoms arose that indicated the necessity of it. The cases which I have related will, I believe, justify me in entertaining this opinion, and in thinking that the contrary practice is now carried by some surgeons to a prejudical extreme."

Here is variation of opinion with a vengeance! According to the first gentleman, we are always to operate for depression; to the second, only with a wound leading down

down to it; to the third, only when symptoms arise to indicate its necessity. How then is a young surgeon to act? By the rules of teachers and authors? No! For, do they not essentially differ? In the hour of danger, then, when every heart beats high with expectation, and friends and attendants look up with an anxious eye to the surgeon for consolation and relief, he, with a mind tortured "'twixt hope and fear," pursues a practice, applauded by some, condemned by others, each of equal celebrity, and each deserving of implicit credit! If these inconveniences could be obviated, and a determinate plan of treatment resolved on, how great the advantage and utility to the profession in general!

I now enter into the second part of my design, or that of making a few comments on the four cases of depression published in the thirteenth volume of this Journal. I shall reverse their order, by first speaking of Mr. Goddard's, then of Mr. Snow's, and lastly of Mr. Pitt's. The communication given us by Mr. Goddard is a valuable one, inasmuch as it gives us eight successful cases of depression without the operation. It would however have been more satisfactory, for the purpose of assisting us in the consideration of the plan of treatment advised by the second surgeon, had he informed us whether the other six cases alluded to, were accompanied with wounds or not. The other two recent cases detailed are highly instructive, and replete with practical facts, as they demonstrate to us, beyond a doubt, that patients labouring under depression of the skull, *with a wound, and even with the existence of symptoms*, may recover without the application of the trephine.

The first case* is that of a farmer, aged twenty-five, which Mr. G. thus relates: "and depressed a part of the frontal bone, nearly the size of a tea spoon bowl; he was stunned and beat down, but after a time got home. Next morning, when I was called, I found symptoms of depression, dilated pupil, great pain in the head, sickness and vomiting, slow pulse, and great loss of strength. The wound was about an inch long, and the pericranium was detached from the bone, so that the depression was plainly to be seen. As the case did not appear urgent, I determined to try the effect of bleeding, copious purgings, with a low regimen, and a dark room, dressing the wound lightly, and was much pleased to find every appearance go

* Medical and Physical Journal, No. 76, p. 526.

on favourably. The man was able to go out in about three weeks, the sore quite healed, and has remained well ever since."

Mr. G. says, "as the case did not appear urgent." Here I must differ in opinion; I think the case was urgent, and might well have justified the operation. I should have operated, and I believe one-tenth part of the profession would have done the same. Yet the event proved he was right; and as such, I think he deserves much credit.

The second case, is that of a boy, aged fourteen, stated as follows: "A blow on the parietal bone, about an inch above the ear; a portion of scalp was detached, and the fracture and depression were more extensive than in the first, and so also were the symptoms; however, the success of former cases induced me to try the same plan, of bleeding and a low regimen, and uniting the scalp by the first intention, which could not be done in the former case, as the parts were bruised and burnt by the powder; and am happy in saying every thing went on to my wish; in three weeks the boy went home to his friends, and has continued well ever since." Here is another case where most surgeons would have operated, yet the consequent success, and forbearance of the operation, are highly creditable to the attending surgeon.

I now come to the third case of depression, transmitted to us by Mr. Snow.* "A soldier, without the least provocation, struck his comrade, who was asleep, and lying upon a form rather in liquor, with a flat piece of iron, about two feet and a half in length, and about six pounds weight, upon the parietal bone, two inches and a half in a perpendicular direction above the extreme edge of the external ear; the scalp was divided nearly three inches longitudinally, and the fracture continued the whole length of the wound, together with the depression of the upper edge of the bone, so that the inferior edge could be very distinctly felt, as well as a small piece of the upper table of the skull, loosely detached, but adhering firmly to the scalp. The blow had divided the continuation of the temporal artery; and as it was some length of time before his situation was discovered, when I went down to him, I found he had lost full two pints of blood. After taking up the artery, and finding the man perfectly sensible, I determined not to use the trephine until the symptoms warranted

* Medical and Physical Journal, No. 74, p. 295.

ranted it; and closing the wound by two stitches, left him for the night. In the morning (being December 4) I was much pleased to see him entirely free from every appearance of coma, delirium, or even fever; I gave him a saline purge, which operated three or four times copiously. In the evening I repeated my visit; I thought his pulse a little too full, although he did not complain of any pain. I took from his arm sixteen ounces of blood, and he expressed himself 'lighter' for its loss. I kept him on very low diet, and continued seeing him three or four times during the day; no alarming symptom occurred. On the fifth day from the accident his pulse felt stronger than I wished it, and I was very particular in my inquiries respecting his feelings, but he assured me he felt as well as usual; however, I considered it better, if possible, to prevent the approach of inflammation, and I bled him to sixteen ounces, as before, and no return of fulness existed afterwards. During the whole time of his illness, his appetite continued very good, and his bowels regular; and as no fever, or any other bad symptom was induced, I conceived medicines to be useless. On the 21st of December, I reported him convalescent."

This case, like those of Mr. Goddard's, is extremely valuable. It were an unnecessary task to comment much on this case; let it suffice to say that it affords a convincing proof, in addition to many others, that though depression may be attended with a wound, yet still the application of the trephine may be safely dispensed with. Mr. S. says, "The blow had divided the continuation of the temporal artery; and, as it was some length of time before his situation was discovered, when I went down to him I found he had lost full two pints of blood."——"In the morning I was much pleased to see him entirely free from every appearance of coma, delirium, or even fever." Was not this man's favourable situation in the morning, chiefly owing to the liberal quantity of arterial blood he had lost from the division of the temporal artery? And does not this strongly indicate the utility and advantage which are to be derived from free and repeated bleedings in similar cases?

The fourth and last case, recited by Mr. Pitt, now presents itself to my notice. The following is Mr. P's account of the case.* "On clearing away the blood and shaving

* Medical and Physical Journal, No. 75, p. 445.

shaving his head, I perceived a large wound on the right side and towards the vertex, near the posterior and superior angle of the parietal bone, part of which was laid bare; it extended forward about four inches in length, parallel with the sagittal suture. As the *mental faculties* of the boy were *not at all impaired*, I did not at first conceive that any fracture had taken place, more particularly as the bone appeared perfectly smooth and without fissure when laid bare; but on lifting up the scalp and examining further, I found I was mistaken in my conjecture. I immediately dilated the wound, and discovered that the parietal bone *was fractured and depressed*, at least three inches in length, and three-quarters of an inch in breadth near the posterior and superior angle, and passing forwards nearly in the direction of the wound. I immediately applied the trephine, and raised the depressed part; no effusion had taken place; the scalp was laid down, dressed with mild digestive, and the dressings secured by a bandage and a cotton night cap. The patient (I was informed by the officer who brought him) appeared rather convulsed as he came in the boat; but when brought on board the ship he had no symptoms of them; on the contrary, he was perfectly sensible, and answered any questions that were put to him, and continued so during the whole time of the operation. During the first night after the operation he appeared rather delirious for a short time once or twice, and had some slight febrile symptoms, and the four or five succeeding nights had a slight return of fever without delirium; after which he had no complaint, except a slight head-ach now and then, until the completion of the cure."

This case is less valuable than the preceding ones, as it is only a proof of the operation succeeding in a case of depression, without symptoms. After having related this case, Mr. Pitt goes on to say, "In the preceding case, not one of the symptoms generally enumerated, viz. stupor, loss of sense and voluntary motion, dilated pupil, &c. were present, although the depressed part of the bone was pressing firmly on the dura mater; and had there been no external wound, it might have been difficult to have ascertained the existence of a fracture; in which case the patient would have been freely bled, had purgative medicines given him, and he would have been supposed to be doing well, until, in a short time, all the alarming symptoms would have shewn themselves; violent inflammation would in all probability have taken place in the membranes

branes of the brain, which might have terminated fatally." All these, to use the language of the ingenious Dr. Kinglake, are gratuitous conclusions, controverted by observation, witness the successful cases of depression related by Mr. Abernethy,* in his Surgical Essays, and others, where no operation was performed. Mr. P. asks, "If it was not to be presumed they (the symptoms in the boy's case) would shortly have taken place, if the piece of bone in the compression had not been elevated?" Though it is very possible, alarming symptoms might have come on, the probability is they might not; but let Mr. Goddard's cases answer this question,—successful, without the operation, though evidently worse than this case, as the pericranium was not only detached from the bone, but *bad symptoms actually existing.*

Before I go further, let me assure the ingenious Reporter, that in thus freely commenting on his case, and remarks, I am actuated by no disrepect, or wish to cavil at his treatment; far, very far from it: nay, I will go so far as to say, that in the case in question, where "the nature of the climate is considered, where, from the excessive heat, determination to the head is easily induced," the operation was warrantable, and perhaps the most prudent practice that could be adopted. It now remains for me to proceed to the third consideration, or that of commenting on the practice of the surgeons, whose opinions I have previously stated; and by comparing detached cases and observations, draw a conclusion respecting the propriety of operating in cases of depression without symptoms. The first surgeon advises "the operation in recent depressions, for two reasons; the first, because inflammation may supervene; the second, long pressure is apt to derange the functions of the brain."

Let us examine these opinions singly. First, or "inflammation may supervene." This circumstance, though it certainly may occur, is yet comparatively rare; this is proved by numerous and well attested cases of success published by Mr. Abernethy, and other eminent surgeons. The fear of inflammation supervening therefore, some time after the injury is received, in my opinion, cannot justify the operation; it is using the trephine as a prophylactic: and to use a strange, but certainly applicable simile, it is something like putting a man under a course of mercury *post*

 coitu

---

* Abernethy's Surgical Essays, vol. iii.

coitu with a Cyprian goddess, under the supposition of his having received a syphilitic infection! And now for the second, or "long pressure is apt to derange the functions of the brain." This, though its possibility cannot be denied, an instance of which I have myself seen, is yet best answered by the observations of several excellent surgeons, particularly by the ingenious Mr. John Bell,* of Edinburgh; and in addition to this, and other authority, I may state the information of a friend of mine, who during his residence in Ireland, in a military capacity, saw several cases of depression of the skull, where no operation was employed; and though a considerable time had then elapsed, the subjects of these cases remained perfectly well.

Still further to strengthen the remarks I have presumed to make on these opinions, I might adduce what has been said on this subject by the justly celebrated Mr. Abernethy. But as his interesting Essays are universally read, this appears to be unnecessary.

The second surgeon tells us, "Operate only for depression with a wound leading down to it." Neither can this, in my mind, justify the use of the trephine; for though bad consequences may occur from neglecting to operate, yet the cases of Mr. Abernethy and other surgeons, shew that this is by no means to be frequently expected; or, if it is, why did not danger ensue from the cases of Mr. Goddard; cases where the pericranium was detached from the bone, and *bad symptoms actually existing?* or in the case, published in this Journal by Mr. Snow?

The third surgeon says, "Whenever the patient retains his senses perfectly, I should think it improper to trephine him, unless symptoms arose that indicated the necessity of it. The cases which I have related will, I believe, justify me in entertaining this opinion, and in thinking that the contrary practice is now carried by some surgeons to a prejudicial extreme." What comments am I to offer on this practice? None! I believe none to be required. I have promised in a former part of this paper, to draw a conclusion respecting the propriety of operating in cases of depression without symptoms; but that modesty and caution, which I hope, in my writings, I shall never violate, withholds my pen, and whispers me to forbear. The opinion I have ventured to form, in my own mind, is, I flatter

* Discourses on Wounds, by John Bell, vol. ii.

flatter myself, from what I have already written, sufficiently evident. I meant to say,—but enough of this, I will not presume to decide, I leave the task to abler and more experienced surgeons.

> "Let those teach others who themselves excel,
> "And censure freely who have written well."

Sunderland, June 15, 1805.

Botanical Description of British Plants.

(Continued from our last, pp. 62.—72.)

18. Colchicum. *C. autumnale. C. Anglicum purpureum et album.*

Ang. Meadow Saffron. Tube root. Naked lady.

Gen. Desc. Cal. 0. bloss. six-div. tube very long, extending down to the root. Capsule three, inflated, united.

Spec. Desc. Leaves flat, spear-shaped, upright. *Caps.* large, egg-shaped, with three very blunt angles. *Bloss.* pale purple, tube three-cornered; segment rather unequal; styles reaching down to the root. *Germen* at the root surrounded by rudiments of the future leaves. It flowers in September, dies down and lies within the root all winter; in spring produces the fruit above ground, and ripens it the following summer: this may account for the great length of the styles, and affords, in the structure, an admirable instance of the wise contrivance of Providence. *See Withering, l. c. Meadows, low or mountainous, in rich soil.*

Use. The recent root of this plant, though denied by some to possess any acrimony, yet has been proved by the experience of Baron Stoerck, and others, to be extremely acrid, so as, cut into slices, to irritate by its particles the nostrils, fauces and breast, and even to have benumbed for a time the fingers on which it was held: taken internally, a single grain produced violent effects; and instances are recorded, in which it has proved a fatal poison both to man and brute animals. Stoerck first used it as a medicine; and the oxymel which he prepared from it, he found both *expectorant* and *diuretic,* and in various hydropic disorders eminently successful: he digested 1 oz. of the recent root, sliced, in 1 lb. of vinegar, for forty-eight hours with a gentle heat; the vinegar being strained proved still acrid, constringed and irritated the fauces, and excited

excited a slight cough; to obviate this, he mixed the vinegar with twice its weight of honey, and gently boiled it down to the consistence of honey, forming a grateful oxymel, which promoted a copious discharge of urine, without producing any inconvenience from its acrimony, though it moderately stimulated the fauces and absterged the mucus: he recommends at first 1 drachm of this to be given twice a day in any suitable vehicle, and gradually to increase the dose to 1 oz. or more in a day. It has been found very successful in Germany and France, but in England the squill is thought more efficacious as a diuretic, and still more as an expectorant.—*Woodville.* It seems in its virtues very much to resemble the squill, but less nauseous and less acrimonious, though more sedative. *Withering.* An oxymel prepared from the roots gathered in the beginning of the summer, and administered in the quantity of 6 drs. to a boy, and 1½ oz. to a man, by a drachm at a dose, three or four times in the day, has, in several instances, cured the *dropsy*; but in some it has failed.—*Lightfoot.*

Hexandria. Hexagynia.

19. Aristolochia. *A. clematitis. A. tenuis.*

Ang. Climbing Birthwort.

Gen. Desc. Bloss. six petals, tongue-shaped, entire; stamens near the germen. Caps. six-celled, beneath.

Spec. Desc. *Leaves* heart-shaped, alternate, blunt, shining above, pale green, smooth and veiny underneath. *Flowers* crowded, axillary, six or more together, scored, yellowish green, often tinged with purple. Caps. egg-shaped, blunt, pendent. *Stem* two or three feet high, simple, scored, cylind. zigzag, smooth. *Woods, hedges.* Bl. July, September.

Use. The root has a somewhat aromatic smell, and a warm bitterish taste. Dr. Cullen says, that the difference of quality is not considerable between the different species of the A. but this seems to be preferred by both the London and Edinburgh Colleges. They are all considerably bitter, with more acrimony than many other of the bitters commonly employed. Its name seems to have arisen from the supposition of its *emmenagogue* virtues; and in some cases of retention and *chlorosis,* as a warm stimulating medicine, he has foumd it of use; but in cases of suppression he has never found it of any; and the commendation of it by the ancients in promoting lochia, facilitating birth, &c. is very ill formed. It has long been commended as a cure

cure for the *gout*: it makes a considerable part of the Portland powder, and has often been employed by itself in the same manner as that powder, to be taken every day for a length of time. M. M. ii. 83.

But it is the opinion both of Cullen and Worlhoff, that though it may prevent the recurrence of the gouty paroxysms, yet the long continued use of such medicines is extremely hurtful, and commonly brings on a general state of disease more fatal than the original distemper.—*Woodville.*

Class VIII. Octandria.

Octandria. Monogynia.

1. Epilobium. *E. angustifolium. Sysimachia Chamænerion, Onagra.*

Ang. Rosebag willow-herb.

Gen. Desc. Cal. four-leaved, deciduous. Pet. four. Caps. beneath, four-celled, very long; seeds many, downy at the top.

Spec. Desc. *Stamens leaning.* *Leaves* scattered, strap-spear-shaped, with a few small teeth. *Bloss.* irregular, rose-colour, or white: petals entire. *Woods, hedges.* Bl. June, August.

Use. An infusion of this plant has an intoxicating quality, and the Kamskatkadales brew from the pith a sort of ale; and from the ale they make vinegar. The suckers of the root are eatable; the down of the seeds, mixed with cotton or fur, has been manufactured into stockings and other articles of cloathing. Goats are extremely fond of it: cows and sheep eat it: horses and swine refuse it.—*Withering.*

2. Epilobium. *E. hirsutum. Sysmachia siliquosa hirsuta.*

Ang. Large flowered willow-herb. Great hairy willow-herb. Codlings and cream.

Gen. Desc. As above.

Spec. Desc. Stam. upright. Bloss regular. *Pet.* cloven. *Leaves* egg-spear-shaped, hairy, half embracing the stem. *Stem* cylindrical, branched, hairy. *Petals* inversely, heart-shaped, fine rose colour, the claws white, with white scores spreading upwards. *Filam.* white. *Moist ditches, river banks, &c.* Bl. July.

Use. Horses, sheep, and goats eat it: cows are not fond of it: swine refuse it. The top shoots have a singularly delicate and agreeable fragrance, but so transitory, that before they

they are gathered five minutes, it is no longer perceptible: it resembles scalded codlings, and from thence the plant derives one of its names.—*Withering.*

3. Acer. *A. pseudo-platanus. A. majus.*

Ang. Sycamore-tree. Sycamore Maple.

Gen. Desc. Male flowers intermixed. Cal. five-cleft. Bloss. five-pet. caps. two or three; one-seeded, ending in a leaf-like expansion.

Spec. Desc. *Leaves* five-lobed, blunt, unequally serrated. *Flowers* in compound, pendent bunches, yellow green. *Pet.* very like the calyx. *Woods, hedges.* Bl. May, June.

Use. If a hole be bored into the body of a tree, when the sap rises in the spring, it will discharge a considerable quantity of sweetish, watery liquor, which is used in making wine, and, if inspissated, affords a fine white sugar. The wood is soft and very white: it is much used by turners for making bowls, trenchers, &c. This tree flourishes best in open places and sandy ground, but thrives very well in richer soil: it grows quick, is easily transplanted, bears cropping, and does not injure the grass under its shade. But it is said to grow best near the sea, and that a plantation of sycamores at fifty feet asunder, with three *sea sallow thorns* between every two of them, will make a fence sufficient to protect the herbage from the spray of the sea. *Gent. Mag.* 1757, *p.* 252. The pollen appears globular in the microscope; but if touched with any thing moist, these globules burst open with four valves, which then appear in the form of a cross.—*Withering.* Maple wood is also much used for the lathe; the Acer campestre.

4. Vaccinium. *V. myrtillus.*

Ang. Black worts. Black whortle berries. Hurtle-berries. Bil-berries. Wind-berries. Blea-berries. Bilberry whortle.

Gen. Desc. Cal. sup. Bloss. one-pet. filaments fixed to the receptacle. Berry four-celled, many-seeded; beneath, dimpled.

Spec. Desc. *Stam.* 10. Fruit-stalk one-flowered. *Leaves* bluntly serrated, egg-shaped, alternate. *Stem* and *branches* four-cornered. *Bloss.* seg. five; nearly globular, flatted at the base, pale reddish purple, mouth very small, with five small reflected teeth, reddish white. *Caps.* cells five. *Berry* blue black. *Woods, heaths.* Bl. April, May.

Use. The berries are often introduced at our tables: they are very acceptable to children, either eaten by themselves, or with milk, or in tarts. Their juice stains

2 linen

linen or paper of a purple colour. The Moor-game live upon them in autumn. Goats eat this plant; sheep are not fond of it; horses and cows refuse it.—*Withering.*

5. VACCINIUM. *V. uliginosum.*

Ang. Great Bilberry bush, or whortle. Rasp-berries.

Gen. Desc. *As above.*

Spec. Desc. *Leaves* very entire, inversely egg-shaped, blunt, smooth; when young, fringed at the base; flat, a net work of veins underneath. *Stem* one foot high. *Bloss.* pink. *Berry* blue, four slight angles; pulp white. *Moist woods, heaths, &c.* BL. April, May.

Use. The juice of the berry is said to be frequently used by vintners in France, for the purpose of colouring their white wines red. Children sometimes eat the berries, but taken in large quantities they occasion giddiness and a slight head-ach, especially when full grown and quite ripe. Horses, cows, sheep, and goats eat it; swine refuse it.—*Withering.*

6. VACCINIUM. *V. vitis-idæa.*

Ang. Red whortle-berries.

Gen. Desc. *As above.*

Spec. Desc. *Leaves evergreen*; inversely egg-shaped, entire, edges rolled back, dotted underneath, deeply veined above. *Stem* cylindrical, obliquely ascending, a span high. *Bunches* terminating, nodding. *Bloss.* pale pink. *Filam.* white, woolly. *Anthers* red, two cells, each with a yellow tube at the point; *berry* red. *Floral leaves* and *cups* coloured. It is seldom found in blossom. *Dry heaths, woods, mountain tops.* BL. March, April.

Use. The berries of this species are acid, and not very grateful, but they are eaten by the inhabitants of Lapland, and by the country people; and they are sent in large quantities from W. Bothnia to Stockholm, for the purpose of pickling.—*Linn.* They are also made into tarts, rob, jelly, &c. Goats eat the leaves; cows, horses, and sheep refuse them.—*Withering.*

7. VACCINIUM. *V. oxycoccos.*

Ang. Cran-berries. Moss-berries. Moor-berries. Fen-berries. Marsh whorts. Marsh whortle berries. Corn berries.

Gen. Desc. *As above.*

Spec. Desc. *Leaves evergreen*, egg-shaped, entire, edges rolled back. *Fruit stalks* single or in pairs, one-flowered, red, semi-transparent. *Stem* thread-shaped, trailing, not hairy. *Cal.* smooth, fringed at the points, coloured. *Bloss.* four

four distinct petals, deep flesh colour. *Stam.* often 10; *anth.* two-celled, ending in a hair-like open tube. *Style* red, tubular. *Summit* an open hole. *Berry* purplish red. *Peaty bogs.*

Use. At Long Town, in Cumberland, these berries are sold by the country people to the value of 20 or 30*l.* every market day, for five or six weeks together.—*Lightfoot.* Made into tarts they are in general much esteemed, but their peculiar flavour renders them disagreeable to some people. If they be wiped clean, and then closely corked in dry bottles, they will keep for several years; or the bottles may be filled with water. The name of Cranberry, which is the most general, originated probably from the fruit-stalks being crooked at the top, and before the expansion of the blossom, resembling the neck and head of a crane.—*Withering.*

[To be continued.]

CRITICAL ANALYSIS

OF THE

RECENT PUBLICATIONS

ON THE

DIFFERENT BRANCHES OF PHYSIC, SURGERY, AND MEDICAL PHILOSOPHY.

Observations on some late Attempts to depreciate the Value and Efficacy of Vaccine Inoculation. By SAMUEL MERRIMAN. 8vo. pp. 35. London, 1805.

IN our Review of Dr. Moseley's book, we were willing to believe that the Doctor was amusing himself with a playfulness, which, however entertaining to his readers, we did not think becoming the gravity of his profession, or the high importance of the subject. Mr. Merriman has taken the laudable pains of enquiring closer into the facts on which Dr. Moseley has built his arguments, and finds a most inexcusable inattention, or something worse, in the manner in which he has collected his intelligence, or related it when collected. As Mr. Merriman observes, we should be not less thankful to those who would furnish us with well attested facts, whether in favor of or against vaccination: But to those, whose only object is to cavil where they cannot refute, who look only for exceptions to invalidate a general law, who are regardless of the sources from which they

they draw their intelligence, who not only joke on grave subjects, and substitute these jokes for arguments, but, in these festive moments, thunder forth anathemas of lameness, blindness, and deformity, against such as are vaccinated, and accusations of child murder against those whose children have died or may hereafter die at any period after vaccination; to such we can make no appeal, but trust that truth will in the end find her place, and only lament the mischiefs that must follow while she is concealed.

We highly approve Mr. Merriman's industry, candour, and firmness, and recommend such of our readers as have been staggered by the boldness with which Dr. Moseley produces his supposed facts, carefully to peruse the pamphlet before us.

We think, however, that Mr. Merriman's note on Mr. Goldson might have been spared. It would have been enough to state, that vaccination was supported by the fi st medical characters; and tho' we agree with our author, in admitting the absurdity of supposing that the most eminent of the profession could be affected by the insinuations of a few zealous partisans, yet we are convinced that the ill judged importunities of these zealots prevented the cordial co-operation of many honest, considerate, and well informed practitioners. We trust, however, good sense and candour are gradually gaining ground, and for that reason only we wish to hear as little as possible of Mr. Goldson and his adversaries. As Dr. Moseley advances boldly with his cases, we feel duly sensible of the gratitude we owe to those who inquire into his statements; and as to his mode of reasoning, the best refutation would perhaps be, to quote his own words almost without a comment. Mr. Rogers being more modest, might be treated with more delicacy; and as he is much younger, his future improvement is not altogether hopeless.* Besides which, we have no reason to suspect Mr. Rogers's willingness to procure every information, though he may sometimes trust too implicitly to the authority from which he derives his accounts. We shall conclude with a few extracts, addressed to each of these gentlemen. The first is very judiciously selected by Mr. Merriman from Dr. Woodville's History of Inoculation, where it is produced among the causes which for a time impeded the progress of inoculation.

" Dr. Deering, at Nottingham, whose opposition to inoculation I should not have deemed it necessary to notice, had not his pamphlet, entitled, An Account of the improved Method of treating the Small-pox, published in 1737, *contained a striking fact which has never been contradicted.* He says, " I have, with pleasure, read the several accounts of the progress and happy success of inoculation; but when I heard of some who had been inoculated in vain, no eruption ensuing; when *I was an eye witness of the inoculation of a little*

---

* For our remarks on Dr. Moseley and Mr. Rogers, see Medical and Physical Journal, vol. xiii. p. 466, 468.

a little boy, who, notwithstanding the great care there was taken in the choice of the pus, had the confluent kind, severely, and twelve months after had them naturally, and the favourable sort, yet was very full*; when I met with many, and among them three in one family, miserably seamed and pitten; when it was known in several parts of London, that some of the inoculated persons had lost their lives; I could not help fearing these things might do that method harm, as they contradicted the sanguine promises of some of the favourers of that operation.

"It has been insinuated, particularly by Mr. Rogers, a pupil of Mr. Birch, who has published a small pamphlet against vaccination, that no mention has ever been made, till lately, of the small-pox occurring a second time; 'when so many objections were made to inoculation for half a century, surely if this had ever occurred, the enemies to the practice would not have been silent on the subject; yet we know of no such instance (till now) brought forward.'

"Had Mr. Rogers taken the pains of enquiring before he so confidently asserted, he would have found, besides the above case in Dr. Woodville's History of Inoculation, several such instances mentioned among the early opposers of variolation. Indeed, the insecurity of inoculation for preserving from variolous contagion was more dwelt upon than any other objection, and this not only at the introduction of the practice, but even so late as the year 1767.

"Of this kind was the case of the Dutchess of Boufflers, inoculated in the year 1763, by M. Gatti, physician to the King of France, an inoculator of great experience, and one of the most eminent physicians in Paris. There is no reason to doubt, that she was inoculated with genuine variolous virus; and though the circumstances which are recorded of the progress of the inoculation are not sufficiently exact to satisfy us, that she passed properly through that process, yet they were so satisfactory to M. Gatti, that he repeatedly assured the Dutchess she had nothing to fear from the small-pox. Some time afterwards, however, she had the small-pox by casual infection, and M. Gatti rather lamely attempts to account for it, by acknowledging that the opinion he formed was inaccurate. The case, more at large, which is very deserving of attention, may be seen in the Gentleman's Magazine for 1765, p. 495.

"There remain for consideration those cases of eruption consequent to inoculation with variolous virus, after the patient has gone through the cow-pox; these have been very unfairly called 'Cases of Small-pox after Vaccination.' I say *unfairly*, because it has been long known, that inoculation with small-pox matter will produce the same kind of eruption on those who have before had the small-pox, whether naturally or artificially. A case of this kind was

* This boy was the son of Dr. Croft, and inoculated by Dr. Steigerthal, physician in ordinary to King George I.

was published so long ago as the year 1722, by Dr. Wagstaffe, which occurred in St. Thomas Hospital. Mr. Tanner, the surgeon to that hospital, inoculated a person who had undergone the natural small-pox some years before. Dr. Wagstaffe, who was a man of extensive practice, and physician to St. Bartholomew's Hospital, affirms, that the eruptions on him appeared rather *more fairly* than in those (the criminals) who were inoculated in Newgate; and he attended the whole progress of the disease in both instances. Had the practice of re-inoculating variolous patients prevailed in the same degree as it is employed at present with vaccinated ones, similar results would, no doubt, have been oftener noticed.

"It is well known, that mothers and nurses have been repeatedly infected from suckling and nursing children under a heavy load of small-pox pustules; and such persons have sometimes suffered very severely from fever, &c. before the eruption appeared.

"Experiments have been made to determine, whether the small-pox could be propagated by inoculating persons with the matter of such eruptions, and these experiments were perfectly decisive in ascertaining, that the genuine variola was produced. The fact is, therefore, absolutely established, that those who have gone thro' the small-pox are equally liable to be locally affected as those who have been vaccinated. If, then, in the one instance these are not called cases of small-pox, after small-pox, it is unfair to call the others cases of small-pox after vaccination."

Mr. Merriman justifies his expression in saying that they are *unfairly* called such; by showing, that when it was the custom to make experiments of inoculating persons who had previously gone through the small-pox, the same *eruptions* sometimes occurred, and matter taken from them produced the disease.

The following remarks on some of Dr. Moseley's cases are given, that the reader may judge what credit we may attach to the rest.

"'Richard Curling, aged nearly six years, son of Mr. Curling, No. 18, George Street, Portland Chapel, had the cow-pox in May 1800; inoculated by Mr. Ring, apothecary, in Swallow Street, Hanover Square. Nine months after he had the small-pox in the natural way, he had ulcerations about his body, and was otherwise much disordered after the cow-pox.'

"Having some previous knowledge of Mrs. Curling, I determined to call on her, and learn the particulars from herself. I was accompanied by my friend Mr. Henning, surgeon, of Newman Street, who can vouch for the truth of the following statement.

"On being informed, that we were desirous of making enquiries respecting a child of hers, who was said, in a publication of Dr. Moseley's, to have had the small-pox after being vaccinated, she expressed a readiness to give all the information in her power; and the replies which she made to the questions put to her, were given in a candid and proper manner.

"They were in substance as follow:

"That the boy was inoculated for the cow-pox by Mr. Ring; that

that some months after, the exact time she cannot recollect, he had, what *she* thought, the small-pox. That she shewed the child, whilst under the eruption, to Mr. Leighton, surgeon, of Welbeck Street, and Mr. Draper, apothecary, of Bulstrode Street, Mary-le-bone; who both declared that the eruption was the *chicken-pox*; that they both saw it when it was at or near the height; that Dr. Moseley did not see the child during the time of the eruption, nor did any other medical man, except those abovementioned; that a gentleman, who she supposes was Dr. Moseley, came to her about two or three months ago, and enquired if her child had not had the small-pox after vaccination, to which she replied she thought he had; and Dr. Moseley, *without making any enquiry into particulars*, said, there was no doubt about it. She further said, that the eruption continued out only a few days, *she is positive not a week*, and she believes the eruption was dried away at the end of five days at the farthest.

"The other case, if it can be called a case of variolous eruption after the cow-pox, occurred in a little boy, son of Mr. Johnson, No. 16, South Molton Street, whom I vaccinated about two years ago, entirely to my own satisfaction. Mr. Johnson has lately had a younger child inoculated with variolous virus, by Mr. Hyde. This child had the disease very plentifully, during which time the boy, who had undergone vaccination, was continually with her. In the evening of Saturday, June 22, a few pimples came out on him. On the Tuesday following, before three days had elapsed, they were completely dried away, as my friend, Mr. Seares, surgeon, of Half Moon Street, can testify. Four or five more pimples afterwards made an appearance, and as quickly disappeared.

"An opportunity has likewise been afforded me, of pointing out another erroneous report which Dr. Moseley has given circulation to, in his Treatise, p. 135; he there says, that the elder son of Mr. Englefield, of Kentish Town, who had been vaccinated by Mr. Sandys, 'soon after the inoculation, broke out in violent ulcerations, and died in a miserable manner.'

"I am authorised by Mr. Sandys to contradict this report. He stated to me expressly, that the elder child, as well as his brother, recovered perfectly from the vaccination; that a slight eruption on the skin, altogether distinct from and independant of the cow-pox, afterwards appeared, but that there was nothing at all uncommon or alarming in this eruption; that about three months after being vaccinated, the eldest son was attacked with a peripneumony, of which he died."

We shall make no other remark than, that how entertaining so ever his mode of reasoning and collecting *facts* may be to Dr. Moseley, we wish him to recollect the fable of the frogs who perished for the amusement of school boys.

Cases

Cases of Two extraordinary Polypi removed from the Nose, the one by Excision with a new Instrument, the other by an improved Forceps, with an Appendix describing an improved Instrument for the Fistula in Ano, and Observations on that Disease. Illustrated with a copper-plate. By THOMAS WHATELY, Member of the Royal College of Surgeons in London. Octavo, pp. 42. 1805.

THE first part of this little tract contains an account of a polypus so large and so peculiarly situated, that the author found it necessary to remove them in a different manner from what is usual. One was removed from the nose by excision, the other from behind the velum pendulum by the forceps. The instruments and diseases are well illustrated by the engravings, and very satisfactorily described. Many practical remarks are added, and also proposed improvements in the operation, under certain circumstances.

The improved instrument for the fistula is attached to the case before given to the public in our Journal; some further alterations are suggested.

Dr. Jackson, on the Treatment of Fevers.

(Continued from our last, pp. 85.—97.)

The manner in which Dr. J. employs his chief remedy, the Bath, is detailed in the following extract.

" When the condition of body, under which cold bathing acts with effect, has been prepared by previous bleeding, by emetics, by purges, or by other means; so that congestion in the venous system is removed, and that the pores of the skin are opened; or when congestion in the biliary system and derangements of the alimentary canal, consequences of the direct action of the morbid cause, have been changed or affected in their conditions; the surface of the body being then warmed by the air of an heated apartment, the skin stimulated by frictions, and animated by warm bathing; in short, when the whole moving powers have been placed upon a ticklish balance, the affusion of cold water upon the naked body,—upon the head and shoulders, in the manner of a shower bath, produces a strong effect; it then ordinarily produces its own action, which is analogous to that of health. The effect is indicated, as the act is usually followed by a full, strong, a free and expanding pulse,—frequently by a copious perspiration, by a sound and refreshing sleep, and by a sweet sensation of comfort in all the feelings. It is desirable in conducting this process, that the degree of cold be as near that of freezing as possible; it is essential, that the water be pure,—fresh from the spring or fountain, and that the affusion be continued, till marks are evident, that an impression is made upon the circulation. If the effect be not decidedly attained by the first application, it will be proper to allow the patient, after he has been

rubbed dry and covered with a sheet or blanket, to recline upon a couch for a few minutes. The process must then be repeated, so modified and changed in its circumstances, as may best insure the purpose for which it was undertaken. It was the author's custom, at one time, to dash water upon the head and shoulders, in large quantity, from buckets; but as the idea of such drenching is formidable to most people; and, as it is not certain that any benefit is obtained from the impression of fear, he now generally prefers the practice of washing the body with sponges, which take up a large quantity of water, so as to imitate a shower bath, continuing the washing for a length of time sufficient to make an impression. This answers well, where the degree of cold of the water is under forty degrees of Fahrenheit's thermometer; where above that, the effect is to be attained by the larger quantity and force of application. It is to the upper parts of the body,—the head, shoulders and trunk, that the cold water in this process is principally applied. It was even usual, and it was thought to be useful, to keep the lower parts immersed in warm water, during the cold affusion upon the upper parts. At other times, it was thought better to cause the patient to plunge at once from the warm to the cold bath, remaining immersed a longer or shorter time, according as the circumstances of the case might seem to require; for, as an effect is the object, it is necessary that there be some evidence that the effect is attained, at leats, put into the proper train for attainment, before the process be discontinued.—It is attained with more or less facility, according to the state of the previous condition.

"When the process of bathing is finished, the patient is carried to bed. There is no occasion for being scrupulously nice in drying the body. It is even better, where there is much superficial heat, that it be not dried at all. In the opposite circumstances, as it is always grateful, so it is generally useful, to rub the body for some time with hot flannel cloths.—Such practice seems to encourage the feeble beginnings of a salutary movement."

Dr. J. adduces several instances, in which the carrying of patients in open waggons, from necessity, during the retreat of armies, effected a cure without the assistance of any other means. His directions for Gestation may be collected from the following observations:

"It is evident from the facts here mentioned, intances similar to which are numerous and authentic, that a salutary change of an extradionary nature is operated upon persons ill of fever by the action of pure air, particularly, when combined with the act of motion through the air, in carts, carriages, or other conveyances. The change is singular; and the circumstances, in which these singular changes are most conspicuous, require to be explained and described, with as much precision as possible; for, though the means be powerful, they are not useful indiscriminately in

in every fever, nor in every circumstance of the same fever. It sometimes happens, and it is vulgarly known, that slight febrile indispositions are turned off in the beginning, by exercises in the open air, more severe than usual, or longer continued; but though this fact has been often observed, yet it must, at the same time, be remembered, that the commencement of fever is not usually the period in which the great benefits of this remedy are to be expected. The period at which the salutary effect is most certain, is the point of time when the circle of the diseased motions is completed, or nearly completed; that is, when a product of diseased action has been effected, or an office performed, in consequence of which the machine becomes again sensible to the impressions of ordinary causes. This, according to circumstances, may happen after the third day; but it rarely happens till after the fifth or seventh. A circle of febrile movement is generally completed at these periods. Hence the stimulation of pure air, or rather a succession and forcible impression of pure air, in consequence of progression, solicits the moving principle of the animal machine to resume its usual action, or, the rhythm of movement in which health consists. Health is thus established: But if this cause,—the common stimulant of life, be not applied at this period with some degree of force, a new circle of diseased action is probably put in motion,—runs over another course, produces another product, similar to the former; or it varies its product, according to the variety of circumstances by which it may be acted upon. Hence it is in fact, as it might be expected to be in reason, that the period for the effectual employment of this remedy, is more peculiarly that point of time when the diseased movement has completed the circle of its course; or that condition under which the diseased movements have been arrested artificially, by the effects of bleeding, of emetics, purgatives, or other means.

" It is to be remarked, that the act of transporting persons in the early stage of fever, with signs of plethora, is not beneficial; it is not useful, or even safe, where there exist, with such fever, signs of inflammation in the internal organs,--the head, heart, lungs, liver, or intestines. The same means, on the contrary, are followed by the most signal and decided relief, where there are signs of congestion in secreting organs; as in the bilious or ardent fever, attended with great anxiety, with burning heat, restlessness, want of sleep; in short, with all the aggravated symptoms usual in the bilious autumnal fever of hot countries. It is in this form of disease, that its good effects were so conspicuous in the campaigns in the southern provinces of America: the rule holds equally in tropical climates. It is the last anchor of hope, in the late stages of the concentrated endemic, to which Europeans are liable soon after their arrival in the West Indies,—a disease, which may be cut short in the commencement, with almost a positive certainty; but which, when left to itself, very generally

generally tends to destruction, degenerating into what is called yellow fever, with black vomiting, and all its formidable train of symptoms.

"In this situation of things, (certainly a hopeless one, for the susceptibility of impression is nearly lost,) the act of moving the body rapidly, in an open cart, or carriage, through woods, on the green turf; or in defect of woods, shaded, if in the day time, with boughs of trees; exposed, if in the night time, to all the freshness of the air, and all the dews of heaven, has appeared to do what no other means were capable of doing. The effect of this practice will be rendered more certain by previously taking away some blood, in relief of the congestion which has already taken place in the venous system; by sprinkling the body occasionally with the coldest water that can be procured; by moving at a brisk pace—even over unequal ground; by occasionally repeating the sprinkling with water; by opening the vein a second, or even a third time; in short, by adopting and persisting in such a train of processes, as not only originate a new movement, but as confirm it when begun. It is vain to expect that this can be effected in a short time, that is, in less than six or eight hours: hence it happens, as might be expected, that this remedy, when ordered by design, often fails; because the operation is not continued a sufficient length of time: when adopted from necessity, it often succeeds; for the operation is continued till the effect is confirmed.

"It is thus, that the advantages of the remedy are more remarkable in journeys of necessity, in open carts or waggons, exposed to wind and rain, to heat and cold, than in airings for an hour or two in carriages, where the subject is defended from the weather, or but partially touched by the salutary influence of the air. Airings are, in fact, but feeble substitutes for the travelling recommended in this place; for the continuance of the motion ought to be for six or eight hours at least; and all the circumstances connected with it ought to be so arranged, that an impression may be made, that a new movement be originated, and that it be confirmed in its course by a due continuance of the application of the necessary causes. The action of pure air, on the human body, is the natural stimulant of life; the action of pure air, combined with exercise in the open air, is an obvious cause of health and vigour.

"The remedies which have been noticed in the preceding pages, are of a powerful operation; and, if well managed, they are usually effective of their purpose, viz. the subversion of diseased or irregular movement,—the renewal of that which is just and natural. They are not, however, very commonly employed according to that idea. The action of bleeding, of warm and cold bathing, or the effects of the rapid successions of pure air upon animal bodies, in certain states of languor and disease, have not, perhaps, as yet been estimated upon the true principle."

Though

Though Dr. J. considers these as the most powerful and effectual means of curing malignant fevers, yet he does not neglect the advantage to be derived from the use of *Peruvian bark, wine, opium, blisters, mercury*, and *amusements*. These, however, he does not class among the primary and radical means of cure, but rather as accessories to be employed, when some progress has been made by his great remedies. The accessories seem with him to assist principally in securing the ground previously gained, and above all, in preventing *relapses*. With the best means of obviating relapses and accelerating convalescence, which are highly important considerations in all cases, but more especially in armies, Dr. J. concludes his valuable Treatise on the 'Action of Causes in the Production of Fevers, and the Action of Remedies employed in their Cure.'

Report of Diseases in the public and private Practice of one of the Physicians of the Finsbury Dispensary, from the 20th of June, to the 20th of July.

Febris - - - - - -	3	Menorrhagia - - -	1
Catarrhus - - - -	5	Leucorrhœa - - -	3
Dyspnœa ebriosa - -	1	Anasarca - - - -	6
Phthisis pulmonalis -	7	Epilepsia - - - -	2
Cynanche - - - -	9	Morbi Infantiles - -	16
Ophthalmia - - - -	4	Diarrhœa et Cholera -	12
Dyspepsia - - - -	18	Morbi Cutanei - - -	9
Hypochondriasis - -	2		

The Reporter has this last month been impressed more deeply than ever he was before with the fatal folly of bleeding in the generality of those cases to which venesection is too frequently applied.

A person who, at a very advanced period of life, was sinking under the combined operation of age and intemperance, was advised, on account of a difficulty of breathing, arising from general debility and a mutilation of the pulmonary organs, to experience frequent and extravagant evacuations from the arm, which, of course, in a very short time, put a period to his terrestrial existence.

If the employment of the lancet, although in some instances it is of undoubted use and necessity, were abolished altogether, it would, perhaps, save annually a greater number of lives than in any year the sword has ever destroyed.

Medical men are sometimes apt to consider themselves, and are generally regarded by others, as insignificant and inefficient, unless they are doing something; that is, either performing some painful operation, or administering some

 powerful

powerful remedy. Whereas, the fact is, that, in no inconsiderable proportion of cases, the best thing that can be done is to let the patient alone. An inflammatory fever,* or a habit indicating excess of general excitement in this enervated age, very rarely indeed occurs. And *local* inflammations, such as acute rheumatism, gout, or cynanche, will seldom, with impunity, permit the opening of a vein. In the last disease, the writer has had more especial reason to entertain this opinion, in which he is confirmed by the authority of a man celebrated as a philosopher, altho' not a member of the medical profession.

"Ah! these accursed physicians, they will certainly kill her with their blood-lettings. I have been myself extremely subject to the quinzy, and have invariably found that bleeding increased its violence: when, on the other hand, I contented myself with simply using a gargle, and putting my feet in warm water, I generally found myself well the following day."†

In cases of scrophulous ophthalmia, the writer has recently found advantage in applying *cold* to the whole body, as well as to the organ more particularly affected; the salutary power of this agent seems to increase nearly in proportion to the extent of surface to which it is applied.‡

Fevers, and other analogous complaints, appear not to prevail at present, to that extent which might be expected in London, at this period of the summer. It is not the intensity of the heat, so much as the complicated polution with which, in consequence of it, the atmosphere of the metropolis is, more especially in the warmer months, impregnated, that tends to disorder and to debilitate the constitution of its inhabitants.

> "It is not air, but floats a nauseous mass
> Of all obscene, corrupt, offensive things." §

Happy are they, who, unconfined by professional or any other chains, are, at this season of the year, at liberty to enjoy the salutary fragrance of vegetation, or to seek refreshment and relief in the still more enlivening breezes and invigorating exhalations of the sea.

Greville Street, Brunswick Square, July 25, 1805. J. REID.

---

* Dr. Cullen states, that he never saw an instance of this fever during forty years of the most widely extended practice.

† Original Correspondence of Rousseau.

‡ The Reporter has lately received a copy of a Treatise on the Operation of Cold from Dr. Stork of Bristol, a writer of merit, who, although not an implicit disciple, exhibits, in his work, a mind illumined with the rays of Brunonian philosophy.

§ Armstrong.

MEDICAL AND PHYSICAL INTELLIGENCE.

[FOREIGN AND DOMESTIC.]

The following interesting Paper having been received too late to be inserted in the body of the Journal, the Editors present it to their Readers as the leading article of the Medical Intelligence.

To Dr. BRADLEY.

Dear Sir,

If the following History, which I received by the last packet, from a correspondent who has been a medical practitioner in Jamaica for upwards of thirty years, should be thought of sufficient importance to merit a place in the Medical and Physical Journal, it is at your service. I am, &c.

Clerkenwell, July 24, 1805. W. CHAMBERLAINE.

Case of Yellow Fever, cured by sweating in the Steam of hot Sugar.

ON Wednesday morning last I was called to a young lad about fifteen years old, arrived about three months from London. I found on him every symptom of yellow fever; pulse 110; dry, husky skin, great pain in the head, thirst, &c. I immediately gave him ten grains of calomel and one drachm of jalap, which, after waiting four hours, only procured three motions. I then mixed three drachms of jalap in a pint of water, which gave him seven or eight motions more; his skin still dry and husky. The gentleman the lad lives with is a sugar-baker; I proposed to him to put the lad close to the steams of the coppers, which had an instantaneous and happy effect. The pulse fell from 100 to 70 in a few minutes; the sweat poured off him in streams; his head was immediately relieved; and, what is astonishing, he did not complain of being too hot, notwithstanding a breath of air could not enter the room where he was; and he was surrounded with the steam of sugar from all the coppers. At night he was put to bed; but when I went to see him early on Thursday morning, he had a little of the fever again, and his skin dry and husky. We again repeated the sweating process, and continued it until two o'clock that day (Thursday) when he put on his cloaths, came down stairs, said he was very well, and called for something to eat! and is now at his business quite hearty. All the calomel I gave him did not amount to thirty grains altogether. My reason for trying this experiment was this, and I think myself justified in the sight of God and man, if *I had not succeeded:* A number of the new comers in the

the last fleet have died; and at that moment I was called, a patient of our friend ———— was lying dead, which made Mr. Gutzmer extremely unhappy for the fate of the young lad, whose father is a clergyman in London. I am now determined to adopt the sweating practice, I have seen such instant relief afforded from it in the case of that lad, and subsequently in one or two other cases. For this purpose I have procured a large vessel in my hospital, in which a person can sit down, and receive the steam of hot sugar without any inconvenience. The opening of the pores by external means has this advantage over sudorific medicines, the stomach is not at all affected. There was a Spanish physician here, who, I understand, had adopted this method and found the happy effect of it, and is, as I am informed, now on his way to America to claim the reward for the discovery of curing the yellow fever by the steams of boiling sugar. I never saw him, nor heard of him, until the recovery of this lad was spoken of about town.

Kingston, Jamaica, May 12, 1805.

Mr. Parker, in a letter to the Editors, dated Colchester, July 9, 1805, writes as follows:

"Having lately observed some remarks, in your very useful, and widely extended Journal, on the treatment of leeches, which, from their utility in the cure or alleviation of many local diseases, are now become an object of considerable importance in medical and surgical practice; on this account, and from the great demand, and frequent scarcity of this valuable curative agent, every means that can be devised for preventing its destruction becomes a desideratum: I am therefore induced to offer the following hint for insertion in your Journal. It has been recommended, and, I believe generally adopted, to apply a small portion of salt to the mouth of the leech, that it might empty itself of the blood that it had just sucked; but as this not unfrequently occasions its death, or at best renders it weakly some time, I have lately been in the habit of taking hold of the tail, with the finger and thumb of my left hand, and gently drawing it through those of the other, so as to evacuate the blood; and by these means it is not punished by the nauseating effect of the salt, nor is it much injured by the operation, and becomes by next day fit for service again; which appears to me by far the most humane method of treating the animal.

"I have also to communicate a circumstance relative to the natural history of the leech, which, I think, deserves recording. On removing the cover of an old half-pint bottle, which had been untouched between four and five years, we found it half full of thick, dirty water, in which were one dead and two living leeches; the latter we put into fresh water, and in a short time they became quite lively, and were repeatedly applied to patients."

The

The travels undertaken by Messrs. Alexander Von Humboldt and Aime Bonpland, into the interior of America, excite general interest. In fact, there are few countries so worthy of the attention and investigation of enlightened men, and few travellers have combined with the spirit of observation, and the numerous attainments and talents possessed by Mess. Von Humboldt and Bonpland, such ardour for the improvement of the sciences, such courage and success in the execution of the plan they had formed. Mess. Levrault, Scholl, and Co. have published a Prospectus of the Travels of these gentlemen, the publication of which has been committed to them by the authors. Travellers, say they, have, in general, introduced all their observations into the body of their works; M. Von Humboldt has, however, thought proper to follow a contrary method, and to treat separately of objects which are of a different nature. He is, therefore, determined first to give to the public detached collections, containing whatever relates more particularly to astronomy, geology, botany, zoology, &c. before he publishes what may properly be denominated his Travels, which will embrace every thing connected with general physics, the origin of nations, their manners, their civilization, prosperity, antiquities, commerce, and political economy. Of this portion of his observations, and the History of his Travels, he will at present publish only an abridged account, entitled Abridged Relation of Travels, between the Tropics, performed in the Interior of the new Continent, in the Years 1799, 1800, 1801, 1802, and 1803. Messrs. Humboldt and Bonpland continue publishers, being united by the ties of the most intimate friendship, having shared all the fatigues and all the dangers of this expedition, and have agreed that all their publications shall bear their names conjointly. The preface of each work will announce to which of the two each distinct part belongs. This arrangement will accelerate the enjoyment of the public, and facilitate to a greater number the means of acquiring what will demand a less advance at a time. Besides, it is not agreeable to be interrupted in the midst of a narrative, sometimes by the details of an astronomical observation, and at others by the description of a plant or an unknown animal. He will publish, at the same time, his astronomical observations, and the tables of his barometrical and geodesical measures, under the title of Collection of Astronomical Observations, and Measures executed in the New Continent; and as in his Voyage, he confines himself in mentioning an altitude to the statement of it, without saying whether it was found by the barometer, or whether it was founded on geodesical measures. M. Humboldt then collects into a separate work, all the phenomena presented by the atmosphere and the soil of the equinoctial regions. This work, the result of all the investigations undertaken by our philosopher, during his five years travels in both hemispheres, is entitled, Essay on the Geography of Plants, or physical Picture of the equinoctial Regions, founded on the Observations and

and Measures taken between the Latitude of 10° South, and 10° North, in 1799, 1800, 1801, 1802, and 1803. A large plate represents a section, passing over the summit of Chimborazo, carried from the coasts of the South Sea, to the shores of Brasil. It indicates the progressive vegetation from the interior of the soil, which contains cryptogamous plants, to the perpetual snows which are the limits of all vegetation. Among these is distinguished the vegetation of palm-trees, &c. that of fern-trees, quinquina, and gramineous plants. The name of each plant is written at the height at which it is found, according to the measures determined by M. Von Humboldt. Fourteen scales, placed on each side of the table, relate to the chemical composition of the air, of its temperature, of its hygrascopical and cyanometrical state, of the electrical phenomena, of the horizontal refraction, of the decrease of gravitation, of the culture of the soil, of the height at which the different kinds of tropical animals live, &c. It is, without doubt, the most general physical table, of any portion of the globe ever attempted. The same booksellers are likewise printing two other works, which belong to descriptive natural history; one on botany and the other on zoology. The herbary which these travellers brought from Mexico, the Cordilleras of the Andes, the Oronoko, Rio Negro, and the river of Amazons, is one of the richest in exotic plants that was ever conveyed to Europe. Having long resided in countries which no botanist had ever visited before them, it is easy to conceive how many new genera and species there must be among the 6300 kinds, which they collected under the tropics of the new continent. Were they to publish at once the systematic description of all these vegetables, they would employ several years in ascertaining what is really new, or they would run the risk of publishing, under new names, plants already known. It therefore appeared preferable to give, without any regular order, the designs of the new genera and species, which they have been able sufficiently to determine, and to publish at a subsequent period, a work without plates, which contain the diagnoses of all the species, systematically arranged. It is with this view that they publish the Equinoctial Plants collected in Mexico, the island of Cuba, the Provinces of Caraccas, Cumana, and Barcelona, in the Andes of New Grenada, Quito and Peru, on the Banks of Rio Negro, the Oronoko, and the River of Amazons.

Messrs. Humboldt and Bonpland have been equally fortunate in making discoveries in zoology and comparative anatomy. They have collected, in great numbers, descriptions of animals, hitherto unknown; monkies, birds, fish, amphibious animals; for example, the axaloti of the lakes of Mexico, a problematical animal of a nature similar to the cameleon. M. Von Humboldt has made drawings of numerous objects of comparative anatomy, relative to the crocodile, the sea-cow, the sloth, the lama, and the larynx of monkies and birds. He has brought over a collection of sculls of Indians, Mexicans, Peruvians, and natives of the banks of the Oronoko;

Oronoko; and these drawings are not less interesting for the history of the different races of our species than for anatomy. These materials, among which will be found a notice on the fossile elephants' teeth found at the elevation of 2600 yards above the sea, will appear in numbers, under the title of Collection of Observations in Zoology and comparative Anatomy, made during Travels between the Tropics While these various works are in the course of publication, M. Von Humboldt will complete the engraving of the Geological Atlas of the Cordilleras of the Andes and of Mexico, containing profiles founded on measured heights; of the Essay on geological Pasigraphy, or on the manner of representing the phenomena of the stratification of the rocks, by perfectly simple signs; and of the Geographical Atlas, which will contain a map of the river la Madelaine, in four plates; others of the Oronoko, Rio Negro and Cassiquiare, and the general map of the kingdom of New Spain: the latter will be accompanied with a statistical account of the country. All these maps were drawn by M. Von Humboldt himself, from his own astronomical observations, and a great number of interesting materials which he collected. He will, at the same time, put the finishing hand to the first volume of his Travels. To the subjects already mentioned, as being particularly treated of in that work, should be added, observations on the climate relative to organisation in general; considerations on the ancient state of civilization of these regions, and detailed notices on the management and produce of the mines. A folio volume of engravings will exhibit several views of the Cordilleras, and valuable designs of the antiquities of Mexico and Peru, such as the elegant arabesques which cover the ruins of the ancient palace, several enormous pyramids constructed of brick, statues, and chronological monuments, which have a very striking analogy to those antiquities of Indostan with which we are acquainted. Several of these plates are already engraved with great care. As M. Von Humboldt publishes these different works at the same time in German and French, both editions may be considered as originals. An English translation is preparing under the inspection of the author. The equinoctial Plants, by M. Bonpland, will appear only in French; a great part of the text being in Latin, it will therefore be understood by the literati of all Europe.

The following is a list of their works, which are either in the course of publication or shortly will issue from the press:—Abridged Narrative of Travels between the Tropics, performed in the Interior of the New Continent during the Years 1799, 1800, 1801, 1802, and 1803, quarto, which was to appear in the month of July. Collection of astronomical observations, and measures executed in the New Continent, same size and paper, to appear in the course of the present year. Essay on the Geography of Plants; or Physical Picture of the equinoctial Regions, founded on Observations and Measures taken between the Latitude of 18° South, and 10° North, in 1799, 1800, 1801, 1802, and 1803, quarto, with one plate. Equinoctial Plants collected in Mexico, the Island of Cuba, the Provinces of Caraccas, Cumana, and Barcelona, in the

Andes of New Granada, Quito, and Peru, on the Banks of the Rio Negro, Oronoko, and the River of the Amazons, with plates, folio. Collection of Observations in Zoology and Comparative Anatomy, made during Travels between the Tropics, quarto, with plates. All these works collectively will bear the general title of Travels of Messrs. Alexander Von Rumboldt and Aime Bonpland. They will all be printed uniformly, excepting the Equinoctial Plants, for which a larger size was required on account of the figures.

Permanent and portable Apparatus for purifying the Air.

An apparatus for purifying the air, on the principles of Guyton Morveau, has been lately introduced into several of the hospitals at Paris, and the departments, which possesses the advantage of being portable, and of retaining its properties for a considerable time. It consists of a vessel of thick glass, containing about six decilitres (1¼ wine pint nearly.) The edge of the vessel, which is very strong, is ground very accurately, and covered with a disk of glass, which seals it hermetically.

This vessel is fixed in a small plank, which supports a frame of wood, in the form of a press, and is provided with a screw to raise or lower the plate of glass, in order to open or shut the apparatus at pleasure.

To produce the disinfecting gas, 40 grammes (1¼ oz.) of black oxide of manganese, powdered and passed through a hair sieve, is put into the vessel; afterwards one decilitre ($\frac{1}{6}$ of the capacity) of pure nitric acid, of 1. 40. specific gravity, and an equal volume of muriatic acid of 1. 13. specific gravity, is poured over it.

When the mixture is made, the glass cover is pressed strongly down by means of the screw, care being taken that there is no dirt on the edge of the vessel to prevent it from fitting close. Two-thirds of the vessel must always be kept empty to contain the gas.

To purify any place whatever, it is sufficient to unscrew one turn of the pressure screw, and to leave the apparatus open one or two minutes, according to the size of the place to be purified: the expansion of the gas will be soon perceived through the whole of the apartment: the apparatus is then to be closed.

The effects of this apparatus will continue for about six months, using it daily: and when they cease, the vessel is emptied and washed out, and the ingredients renewed in the proportions indicated.

It is of great utility in purifying the air of hospitals, prisons, workshops, &c. where the number of persons, or any other cause, renders such a measure necessary. The only precaution the use of it requires is, to avoid the spontaneous respiration of the gas immediately on its issuing from the vessel, which, without being dangerous, would be disagreeable.

Similar apparatuses on a smaller scale are also made, which are enclosed in a box-wood case, and carried in the pocket.

A member

A member of the society of sciences and belles-lettres at Douy, has lately published a simple process for purifying water. He takes a common garden pot, in the middle of which he places a piece of wicker work; on this he spreads a layer of charcoal of four or five inches in thickness, and above the charcoal a quantity of sand. The surface of the sand is covered with paper pierced full of holes, to prevent the water from making channels in it. This filter is to be renewed occasionally. By this process, which is at once simple and economical, every person is enabled to procure pure limpid water at a very trifling expence.

A sulphur spring, of extraordinary strength and medical powers, was lately discovered near Darlington, in the county of Durham, upon Mr. Lambton's estate, by some men employed by him to bore in search of coal. Baths have been erected upon the spot, which, from the character the water has already acquired, are resorted to with great eagerness.—We understand that Mr. Peacock, of Darlington, is about to publish an analysis of this water, with its history and medical effects.

A Committee of the Medical Council of the Royal Jennerian Society, has been appointed to enquire into the nature and evidence of those cases of small-pox, which are said to have taken place subsequently to cow-pox, and have excited prejudices against vaccine inoculation.

A new Society has been lately instituted, under the title of the Medical and Chirurgical Society of London; the leading objects of which are to promote a spirit of harmony among the members of the profession, and to serve as a centre for the communication of papers, which from time to time will be given to the public. The following names of the officers and council will justify the highest expectations of the advantages to science which are likely to result from this institution: President, William Saunders, M. D. F. R. S; John Abernethy, Esq. F. R. S. Vice-president; Charles Rochemont Aikin, Esq. Secretary; William Babbington, M. D. F. R. S. Vice-President; Matthew Bailie, M. D. F. R. S. Thomas Bateman, M. D. F. L. S. Gilbert Blane, M. D. F. R. S. Sir William Blizard, F. R. S. Vice-President; John Cooke, M. D. F. A. S. Vice-President; Astley Cooper, Esq. F. R. S. Treasurer; James Curry, M. D. F. A. S. Sir Walter Farquhar, Bart. M. D. Thompson Forster, Esq. Algernon Frampton, M. D. John Heaviside, Esq. F. R. S. Alexander Marcet, M. D. For. Sec. David Pitcairne, M. D. F. R. S. Henry Revell Reynolds, M. D. F. R. S. H. Leigh Thomas, Esq. James Wilson, Esq. F. R. S. John Yelloly, M. D. Secretary.

A Board of Health has lately been established for the purpose of preparing and digesting regulations for the most speedy and effectual modes of guarding against the introduction and spreading

of infection, and for the purifying any ship or house in case any contagious disorder should manifest itself in any part of the United Kingdom. This Board is to hold its meetings at Somerset Place, and it is composed of Sir Andrew Snape Hammond, Sir Lucas Pepys, Dr. Reynolds, Sir Francis Milman, Dr. Hunter, Dr. Heberden, Sir Alexander Munro, and Dr. Harness.

A catalogue of the Medical and Physical Library of the late Prof. BALDINGER, of Marburg, has been published. He was, perhaps, the most curious man in Germany with respect to every thing connected with the medical science. His library comprehends 16,000 volumes, exclusive of detached dissertations, treatises, or memoirs. The number of editions he possessed of the Aphorisms of Hippocrates alone exceeded one hundred; but the most remarkable circumstance connected with his library is, that it is not destitute of any necessary or essential work. The proprietor was fifty years in collecting it, and his heirs wish to dispose of it, if possible, entire.

Dr. Kinglake intends publishing, with all convenient speed, an extensive variety of additional cases, in farther proof of the *salutary efficacy* of the refrigerant treatment of Gout, with illustrative annotations, remarks on the present state and future prospects of the practice; general observations on legitimate criticism, and particular comments on the licentious strictures of some Reviewers on the subject.

Dr. K. requests those of his correspondents, and others who may possess any practical intelligence on the refrigerant treatment of Gout, worthy of public attention, and which they would wish should appear in this work, to transmit it to him without delay, that it might find due admission.

Dr. ARNEMAN, of Hamburgh, late Professor of Medicine in the University of Gottingen, and member of most of the Philosophical and Medical Societies in Europe and America, has undertaken to superintend the foreign department of the MEDICAL and PHYSICAL JOURNAL, vacant by the decease of the late Dr. NOEHDEN.

To CORRESPONDENTS.

Dr. Kinglake's Reply to Mr. Mantal, on Gout, will appear in our next Number.

Communications are received from Dr. Thomas, Mr. Harrison, and Mr. Trail.

ERRATUM.

No. 77, p. 6, last line but one, instead of *this is*, read, *this, if local, is, &c.*